

Forest Industry Employees Training, Safety and Retention

A dissertation submitted in partial fulfilment of the
requirements for the degree of Bachelor of Forestry
Science with Honours by: Kate R. Muir

School of Forestry, University of Canterbury
New Zealand

2014

1.0 Abstract

Forestry employees are the most valuable asset to forest operations. An analysis was completed to determine employee training status, how safe employees feel within their roles and identify major reasons of dissatisfaction.

Through the development of job descriptions and person specifications, it was possible to identify the job requirements along with the personal attributes and qualifications required by employers, to ensure employees were capable of undertaking their role.

There is an identifiable gap within the level of formal education among employees. Over half (55%) of the employees have lower qualifications than those required to have undertaken further forestry on-job training.

A majority of employees', particularly those in machine operator roles feel safe in their forestry operational roles. A small proportion of employees in breaker out, thin to waste and pruning roles feel unsafe. All employees surveyed except loader operators, felt only moderately safe in their role.

The difficult environment associated with forestry was determined to be the major reason for dissatisfaction (52%) among employees, along pay and length of day. Paradoxically, the environment was also a major reason for satisfaction among those surveyed. By identifying the major reasons of dissatisfaction among forestry employees it is possible to improve job satisfaction and employee retention.

Training forestry employees needs to be from a more practical aspect. This will lead to increase the number of employees that are trained for the roles they are undertaking, by ensuring they are equipped with adequate knowledge, and have the skill to work safely and to a high quality standard.

Keywords: training, safety, retention, forestry employee, employee gap, employee satisfaction, employee retention, training gains

Table of Contents

1.0 Abstract	1
2.0 Acknowledgements	5
3.0 Introduction	6
4.0 Problem Statement.....	7
4.1 Research Questions	7
5.0 Literature Review	8
5.1.0 Forestry Employee Analysis.....	8
5.1.2 Person-to-Job fit.....	8
5.1.2 Training	9
5.1.3 Employee Retention	11
6.0 Methods	13
6.1 Job Descriptions.....	13
6.2 Person Specifications.....	15
6.3 Questionnaire.....	15
6.4 Field Assessment.....	16
6.5 Crew Selection	18
6.6 Data Analysis	18
7.0 Results	19
8.0 Discussion.....	32
8.1 Training and Education	32
8.2 Retention.....	33
8.3 Safety	34
8.4 Limitations	36
8.5 Further Study	37
9.0 Conclusions.....	39
10.0 References.....	41
11.0 Appendices	42
11.1.1 Breaker out Job Description	42
11.1.2 Faller Job Description	45

11.1.3 Log Maker Job Description.....	47
11.1.4 Skid Worker Job Description	49
11.1.5 Loader Operator Job Description	52
11.1.6 Hauler Operator Job Description.....	55
11.1.7 Thin-to-waste Job Description.....	58
11.1.8 Pruner Job Description.....	61
11.2.1 Breaker out Person Specification	64
11.2.2 Faller Person Specification.....	67
11.2.3 Log Maker Person Specification.....	71
11.2.4 Skid Worker Person Specification	74
11.2.5 Loader Operator Person Specification	78
11.2.6 Hauler Operator Person Specification	82
11.2.7 Thin-to-waste Person Specification.....	85
11.2.8 Pruner Person Specification.....	89
11.3.1 Harvesting Operation Questionnaire	93
11.3.2 Machine Operator Questionnaire	106
11.3.3 Silviculture Questionnaire.....	120

Table of Figures

Figure 1: Methodology flow chart	13
Figure 2: Operational staff that completed the questionnaire split.....	19
Figure 3: Age class distribution of all participants in the survey	20
Figure 4: Ethnicity distribution	21
Figure 5: Employees time in the forestry industry	22
Figure 6: Length of time in current role.....	23
Figure 7: Employees' reasoning for choosing the forestry industry	23
Figure 8: Education level distribution for forestry employees	24
Figure 9: Employee training situation for current role	25
Figure 10: Recruitment processes	26
Figure 11: Forestry employee future employment intentions.....	27
Figure 12: Employee reasons for satisfaction in employment	28
Figure 13: Employee reasoning for dissatisfaction	28
Figure 14: Employee recent near misses	29
Figure 15: Employee Approved Code of Practice understanding.....	30
Figure 16: Employee rising of health and safety issue frequency	30
Figure 17: Employee feeling of safety in their job.....	31

2.0 Acknowledgements

This research was facilitated by Juken New Zealand Ltd via their East Coast branch.

I would like to thank Dr. David Evison (New Zealand School of Forestry) for the support and direction received from him over the course of this research. I would also like to give special thanks to Dr. Richard Woollons (New Zealand School of Forestry) for his input on statistical methodology.

I would also like to thank the following people for their assistance:

- Sheldon Drummond (Juken New Zealand Ltd)
- Madeleine Savage (Human Resources Consultant)

I would finally like to acknowledge and thank the employees of Juken New Zealand Ltd and the contracting crews, for the time they provided to complete the questionnaires and support they offered. This study would not have been possible without their support and cooperation.

3.0 Introduction

The forestry sector contributes significantly to the New Zealand nation and regional economies. Forestry is the third-largest export earner and contributes 3% to GDP. The industry employs around 20,000 people from forest growing through to primary processing.

Forestry operations often occur in remote locations under variable and sometimes difficult conditions. The recent publicity surrounding workplace injuries and fatalities in forestry and other industries has increased public concern. This provided further incentives for the industry and government to look for ways to ensure a safe working environment. The Independent Forestry Safety Review is due to report in October 2014, and companies have also been carrying out their own investigations, in areas such as employee recruitment, training and retention.

In many cases, informal recruitment methods are used to employ workers in forestry operational roles. Forestry training is currently managed by Competenz and funded by employers. It is undertaken in the form of unit standards, followed by a practical in-field assessment by a qualified trainer and assessor.

As the New Zealand forestry industry continues to increase harvest levels and seeks to increase the productivity of operations, attracting and retaining the right employees will become increasingly important. Understanding the level of fit between current employees and the requirements of their job is a necessary step toward achieving this goal.

4.0 Problem Statement

The forestry industry in recent years has been in the media for various health and safety issues and regular injuries and fatalities occurring. Publicity of the industry is also in response to the underway Independent Health and Safety Review. Forest employee recruitment processes in New Zealand typically follow informal methods. This could be contributing to the potential lack of person-to-job fit and retention of employees in the forestry industry.

There is a gap in the understanding of attributes forestry operational employees require to undertake their roles safely and productively.

Through the identification of required employee attributes, it will allow for a better understanding of the training requirements and methods to improve retention of qualified and skilled employees while attracting new employees into the industry.

4.1 Research Questions

1. What are the required job descriptions and person specifications for each of the forestry operational roles?
2. What is the gap between the assumed requirements and current employee qualifications and attributes
3. What are the major reasons for dissatisfaction of forest operations employees?
4. How safe do forestry employees feel at work?

5.0 Literature Review

5.1.0 Forestry Employee Analysis

5.1.2 Person-to-Job fit

Selection

Forest industry employees have in the past and currently been subject to informal recruitment and employment methods, particularly using family, friends, hunting buddies or some other form of favouritism as the selection methods (Garland, 1991). Research by Garland, although relatively old, highlights a major problem within the industry, particularly as there is increasing importance on training and health and safety systems in production forestry. Effective and sufficient selection methods help to ensure person-to-job fit that is best for the company and operation (Wang & Kleiner, 2004).

Person-to-job fit is referred to as the match between the employees ability to meet the requirements and demands of the job they are employed in (Nikolaou, 2003). Person-to-job fit particularly within the forestry industry is important as there are a number of potentially dangerous situations encountered daily (Mosely & Reyes, 2007).

Although there is little research available about the person-to-job fit within the forestry industry, there is field evidence from other industries including the Australian construction industry that suggested improved productivity and safety with a close person-to-job fit (Behery, 2009). These gains could be of significant benefit to the forestry industry from the perspective of training and safety. Identifying the person fit of employees to their job for the forestry industry has been a key focus for the undertaken study, to build on the knowledge gained from Garland through his extensive research.

5.1.2 Training

Safety

The forestry industry internationally has seen high and unacceptable rates of workplace injuries and fatalities (Slappendel, Laird, Kawachi, Marshall, & Cryer, 1993). New Zealand is no exception, with Cryer and Fleming (1987) reporting findings of fatal accidents between 1975 and 1984 to be 11.5 times higher than the overall workforce fatality rates. Forestry employers need to continue their work, looking into practical methods of improving injury and fatality statistics, while also taking into account the nature of the industry. The safety of forest employees is partially driven by the training employees receive, which assists with their understanding of the role and requirements to ensure the safety of themselves and others onsite (Bell & Grushecky, 2006).

The current focus of the forestry industry is ensuring comprehensive understanding between contractors and their employees, of their responsibilities to ensure workplace safety.

Forestry employees are exposed to a range of environmental conditions that are constantly changing, which suggests employees' judgement and decision-making abilities are critical to their own and others safety (Slappendel et al., 1993). With adequate training and understanding operations, forest employees should be able to more safely carry out their operational requirements (Slappendel et al., 1993). An important step toward achieving improvements in the health and safety of the forestry industry, is to provide sufficient training and understanding to ensure employee safety onsite.

Productivity

"Assessing gains from woodworker training" is research Garland (1987) carried out which outlines the idea that through training, productivity gains and increased safety have been observed within a range of forestry operational tasks. As the New Zealand forestry industry drives toward more mechanised operations, it is going to

be important to ensure the training within the forest operations crews continues to ensure maximisation of productivity

Formal training is common practise in the New Zealand production forestry industry, to provide employees with the skills required to maintain a high level of safety. The level of training employees have, however, is largely unknown to industry employers. The understanding of training gains as researched by Garland (1989), was conducted under controlled lab conditions at Oregon State University. This methodology was not possible to be used in this study; however it would be expected to get similar results, suggesting productivity gains that may be achieved from investing in employee training.

This study does not set out to identify the gains that would be achieved within the crew with increased training, but to identify the level of training that is present within forestry employees.

Garland's strong emphasis on the training of employees with the movement toward mechanisation in the forestry industry will be important to ensure a high level of productivity, particularly with new technology. Ensuring employees are undergoing sufficient training will ultimately lead to an improvement in industry health and safety, as well as productivity. With adequate training of employees in the area of technology, it will ultimately lead to machine utilisation rates above those identified by research undertaken by Garland (1989), which suggested between 40-50% utilisation.

Through the lack of training and experience, it was found that operators are unable to efficiently operate their machines (Garland, 1989). With increased training requirements and experience, production rates were observed to increase in previous research and the employees were safer in their employment.

5.1.3 Employee Retention

Retention and Satisfaction

The most important asset to an industry is said to be employees who are able to lead and understand the operation comprehensively (MacSweeney, 2013). The forestry industry of New Zealand has the need to attract, train and retain new and existing employees, as there is increasing demand with increasing harvest rates nationwide.

Aligning this with research undertaken by Garland (1989), there is a range of reasons for employees leaving the forestry industry. However, this research sets to identify recruitment and retention issues in the New Zealand forestry sector.

There is a range of influences toward employee retention including motivation through social demands being met (Sandhya & Kumar, 2011). In the field, intentions to exert effort into a job to perform at a certain level, are influenced by attitudes (Ajzen, 2011). Therefore, improving satisfaction in the forestry workplace could be a method of increasing the effort exerted to achieve high performance.

The forestry industry globally continues to struggle to attract new employees (Garland, 1990). Retention of employees in the industry is an important step toward retaining the knowledge and experience and thereby promoting industry investment toward employee training. These are steps toward achieving a greater proportion of employees being qualified for task. This thesis sets out to identify employee satisfaction and determine why employees may leave or change their career paths away from forestry.

This research sets to build on that undertaken in other industries, as a step toward bridging the knowledge gap between employees and the roles they are undertaking. Looking into the issues of training and retention within the industry is a key focus. New Zealand's forestry sector is the area of focus for this study to identify current recruitment and employment processes, how the training operations are progressing

and also how to retain the employees within the industry to improve the overall health and safety culture.

6.0 Methods

In order to carry out this workforce study, a number of processes were undertaken from the development of job descriptions, person specifications, followed by a field questionnaire. Figure 1 below, shows the basic methodology of this study; while additional information can be found in the following section (section 6.1).

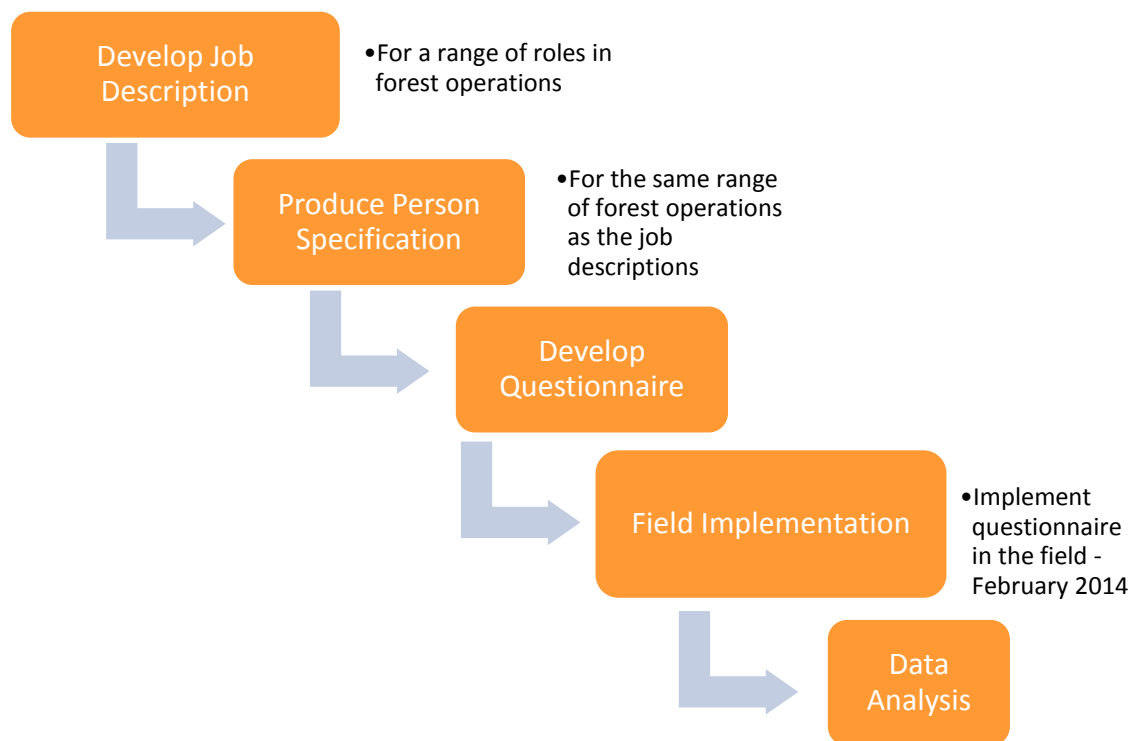


Figure 1: Methodology flow chart

6.1 Job Descriptions

At the time of undertaking this study Juken New Zealand Ltd (JNL) had no job descriptions for operational staff. The company employ their own harvesting crews; however employees rarely go through formal recruitment and employment

processes. Job descriptions used in the study for each of the roles can be found in appendix section 11.1.

Job descriptions were developed for the following roles:

- Loader operator
- Hauler operator
- Breaker out
- Skid worker
- Log maker
- Faller
- Thin to waste
- Pruner

The eight job descriptions developed, provided an understanding of the tasks the employee are required to undertake and also identified the required qualifications for each of the roles. The development of job descriptions was done under the guidance of operational supervisors and managers.

Within the job descriptions the required qualifications were identified from those as specified under the New Zealand Qualification Authority (NZQA) training system, which is currently governed by the training organisation Competenz.

Training is currently undertaken in three steps:

- Issuing of the unit standard booklet.
- Employment in the role, working under supervision to gain experience.
- Further field and practical assessment by a qualified trainer and assessor.

Task requirements were based on knowledge within the assisting team which included company supervisors and managers.

Through the developmental process of job descriptions, some attributes identified were aligned with job descriptions previously produced by a former employee.

6.2 Person Specifications

Person specifications outline the type of person required to undertake the job while also identifying personal attributes and qualifications. The person specifications used in this study can be found in appendix section 11.2.

The person specifications identified:

- Employee competency requirements
- Qualifications
- Experience required

The development of person specifications was identified as the progressing step, following on from the job description development. These documents also included the personal attributes required, as identified in the job descriptions.

Person specifications were developed as for the job descriptions for forestry operational roles.

6.3 Questionnaire

A questionnaire was developed to test current employees against those personal attributes and qualifications as identified to be required in the job description and person specification. Attributes identified in the job description and person specifications were assessed in the questionnaire to identify if a gap was present with the employee attribute requirements as specified by job descriptions and person specifications and what current employees had to offer.

Determining the required information was the first step toward producing a questionnaire that could be used to assess current employee qualifications and attributes against those identified in the job descriptions and person specifications.

Questionnaires were developed for the same operational roles that the job descriptions were developed for. A sample of the questionnaires used in this study are attached in appendix 11.3.

A brief introduction of the study to inform contractors of the study was sent out. This notified them of the purpose of the questionnaire and what the intentions of the study were.

The questions were developed as closed questions to allow a clearer understanding from the employees undertaking the study. Using this type of question assisted with further analysis, whereby employees were given options and answers were converted into an Excel spreadsheet.

There were two parts to the questionnaire taken into the field. The first was previously developed by a third party, to assess employee demographics and also the level of satisfaction among the workplace. This questionnaire had been taken into the field on two previous occasions.

The second part was developed for the purpose of this study, to assess employees understanding of company and industry safety procedures and to identify their training status.

The questionnaires were distributed to employees based on the role they were in on the day of the survey being conducted. There are slightly different requirements from the employees, dependent on the role that they undertake and this was taken into consideration within the questionnaire.

6.4 Field Assessment

It was intended that all forest operational staff would complete the survey. A time slot for each crew was allocated to ensure they were all available to complete the survey before returning back to work. It is assumed that the sample of employees that

completed the questionnaire captured information of around 80% of the operational employees, as there were some absentees on the day of the crews being surveyed.

When employees were absent, the foreman was given a questionnaire for the role they are typically employed in, however no questionnaires were returned by this method and used in this study.

The survey was undertaken throughout February 2014. Three employees from JNL were present when field testing was undertaken.

Sixty four questionnaires were completed, which provided a sample of the operational employees currently employed in the JNL East Coast Estate. Foremen, supervisors and managers were excluded from the sample of those questionnaires as the objective was to look at the operational forestry staff. The following table gives a breakdown of the roles surveyed and frequency of questionnaires that were received and used for the analysis (Table 1).

Table 1: Number of survey respondents by job role

Role	Number of Respondents
Loader Operator	8
Breaker out	9
Skid Worker	7
Faller	5
Log Maker	4
Hauler Operator	5
Thin to Waste	18
Pruner	8
Total	64

6.5 Crew Selection

Survey respondents were from a mixture of six harvesting crews and three silviculture crews. All silvicultural crews were from contractors, however, three of the six surveyed harvesting crews were company employed and the remaining three crews are contractors.

6.6 Data Analysis

Compilation of the completed questionnaires in Excel was the initial step toward undertaking further data analysis. The completed surveys were compiled according to the operational role.

The data was entered into Excel by job type and a new sheet started for each question. This allowed for analysis and further correlations to be drawn between different roles. Participant's names and crews were kept anonymous for the analysis.

Graphs were produced from the results to draw conclusions on forest industry employees and draw inferences. The data analysis stages were undertaken using two statistical programs, Microsoft Excel and R Commander.

7.0 Results

Compilation and analysis of the data collected within the completed questionnaires is shown in the following section. The sample size of operational employees that completed the questionnaire was 64.

The questionnaire was completed by current operational employees. The operational participation split was 59% from harvesting operations, while 41% were from silvicultural operations (Figure 2).

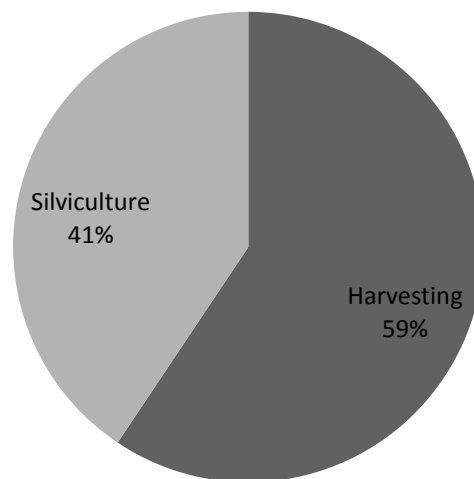


Figure 2: Operational staff that completed the questionnaire split

7.1 Demographics

The demographics of the current forestry workforce were identified, from the completed questionnaires.

The age class distribution of employees was approximately normally distributed around the mean age of 34 years (Figure 3). The modal age was 33 years, and while there was an observed pseudo-normal distribution, there was a spike in the number of employees aged over 50 years.

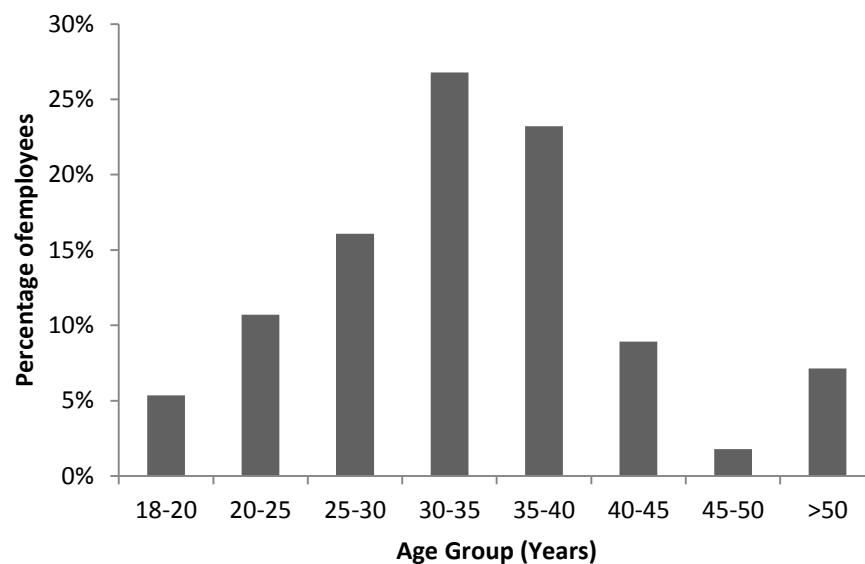


Figure 3: Age class distribution of all participants in the survey

The ethnicity of forestry operational employees within JNL's East Coast Estate is strongly dominated by employees with Maori decent (63%). Of the remaining, 17% are of New Zealand European decent and 20% are of other ethnicity (Figure 4). The other category was largely made up of Cook Island decent; Fijian and Tongan being the most common in this category.

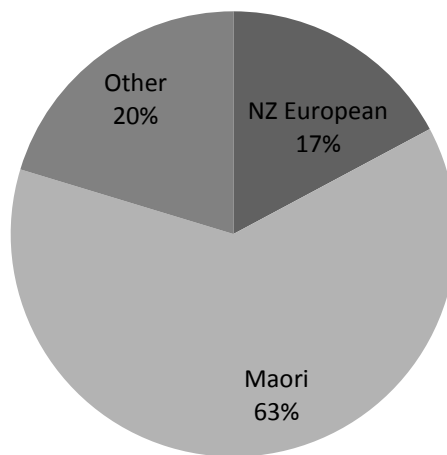


Figure 4: Ethnicity distribution

7.2 Longevity

The length of time employees' have been within the forestry industry indicates a symmetric distribution, with a large proportion of employees having worked in the forestry industry 1 to 5 years (39%) and a significant proportion having worked greater than 10 years (41%) (Figure 5). The observed trends suggest a number of employees have recently been recruited into the industry, while a large proportion that have been within the forestry industry for a long period of time. This distribution below shows, over recent years, employees have been staying in the industry.

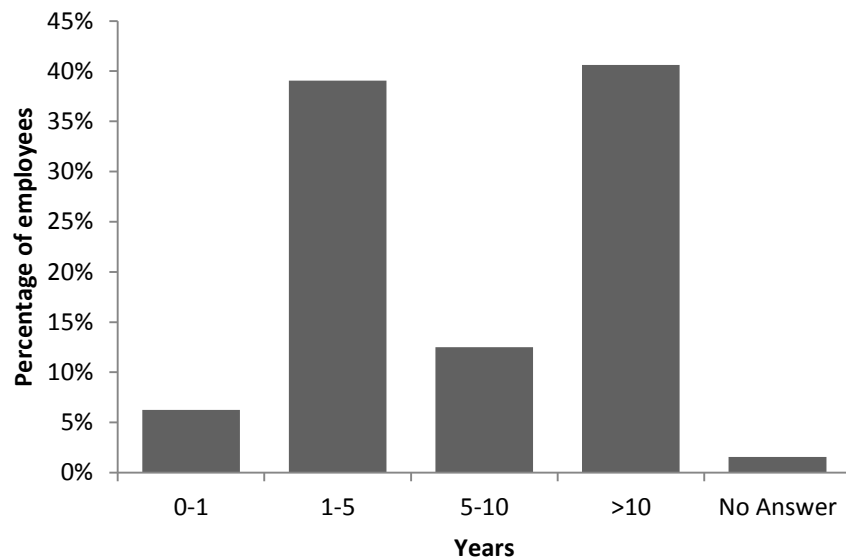


Figure 5: Employees time in the forestry industry

The distributions showing both the length of time in the industry and time in current role indicates retention within the industry is relatively strong (Figures 5 & 6). Around 93% have been in the industry for greater than one year and 60% of employees have been in their current role for greater than two years (Figure 6). One quarter of those employees currently in operational roles have only been in their roles less than one year.

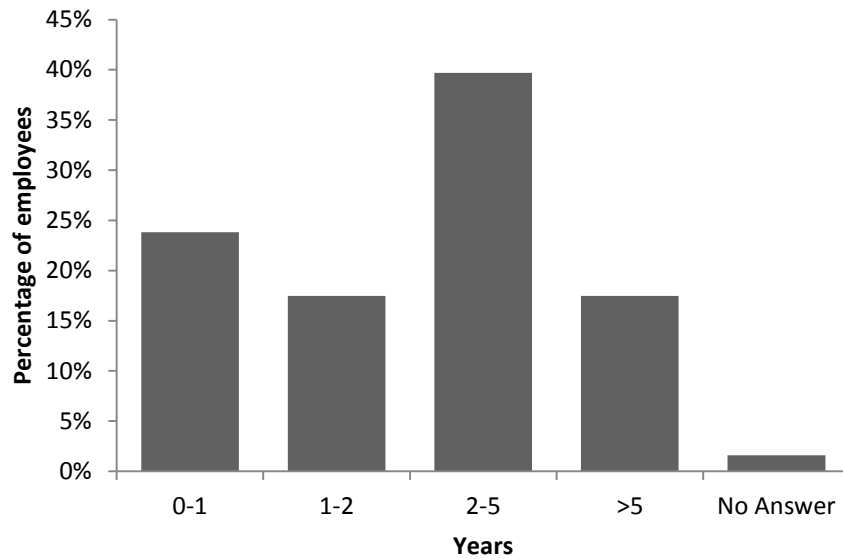


Figure 6: Length of time in current role

The extent of reasoning for employees' choice to work in the forestry industry is diverse (Figure 7). The major contributions for employees choosing to work in the industry included, employees chosen career or the money earned, collectively accounting for greater than 50% of the feedback. The outdoors, it being the only career option, or family reasons are also important reasons suggesting employees' draw card into the forestry industry.

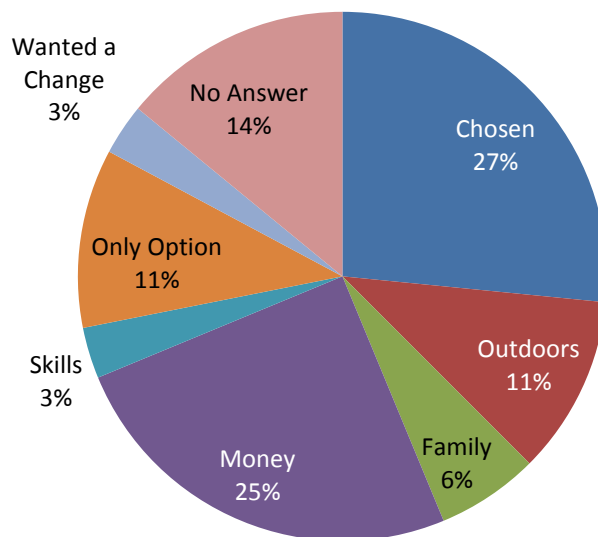


Figure 7: Employees' reasoning for choosing the forestry industry

7.2 Education and Qualifications

The education and training of forestry employees is a key focus for employers. It is shown from determining the employees highest qualification that there is a gap in the education of employees, where their highest qualifications restricts them from having undertaken further training on the job (Figure 8). Greater than 50% of employees surveyed had qualifications that restricted them from having completed further on job training.

Qualifications of NCEA level two and three were also common among those employees surveyed, accounting for 14% each. This supports that it is likely employees have undertaken and completed further forestry on-job training. Polytechnic diplomas were shown to be a common qualification among forestry employees with 21% of participants suggesting that is their highest qualification while only one of those surveyed had completed a degree, which is unrelated to forestry.

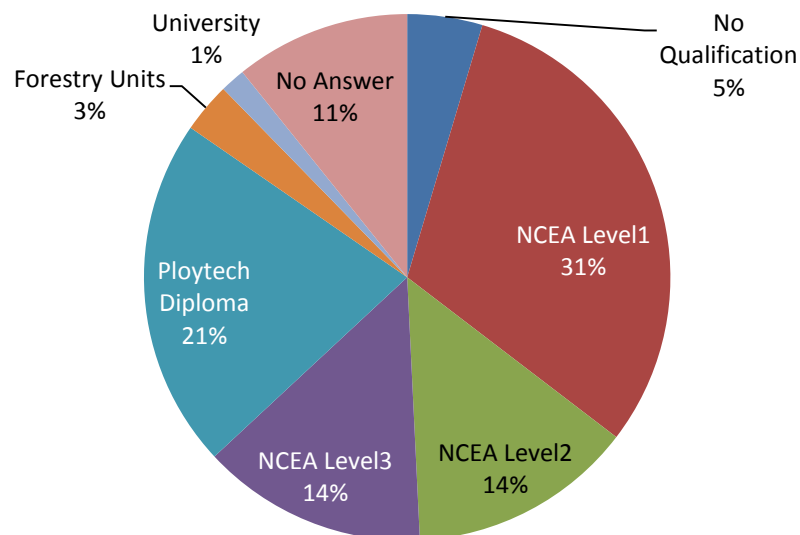


Figure 8: Education level distribution for forestry employees

The number of employees qualified for the task they are undertaking is surprising, with only around 60% being considered qualified for the job they are undertaking (Figure 9). The frequency of training is high, with slightly less than 40% of employees stating they are under training programs.

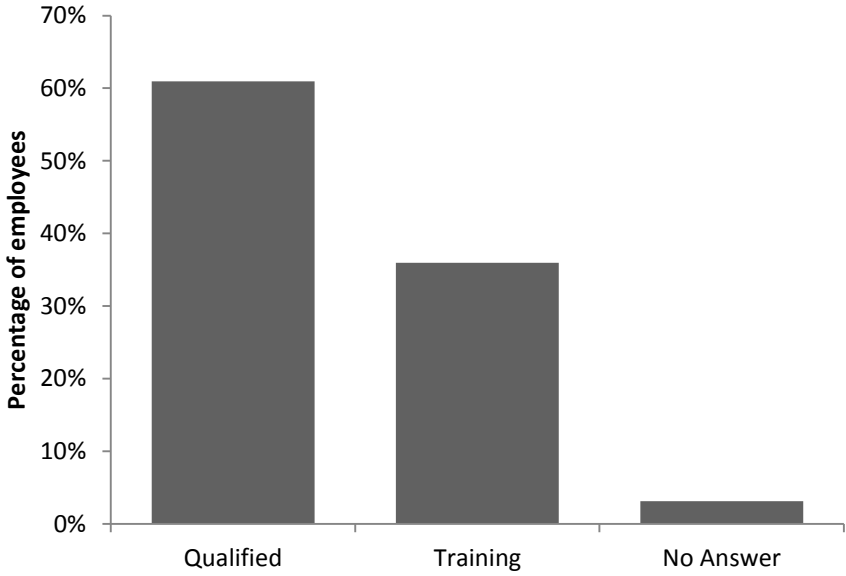


Figure 9: Employee training situation for current role

7.3 Retention

Employee recruitment processes show a significant range of reasons, by which employees' find employment or employers' recruit employees. Of those surveyed, the greatest proportion (55%) found their job or got offered it through a relative or friend within their crews (Figure 10). Being offered the job from a contractor (20%) and asking the contractors for a job (17%) were other methods of gaining employment. It is noted that the smallest proportion of those employed answered advertisements to secure their current forestry operational position.

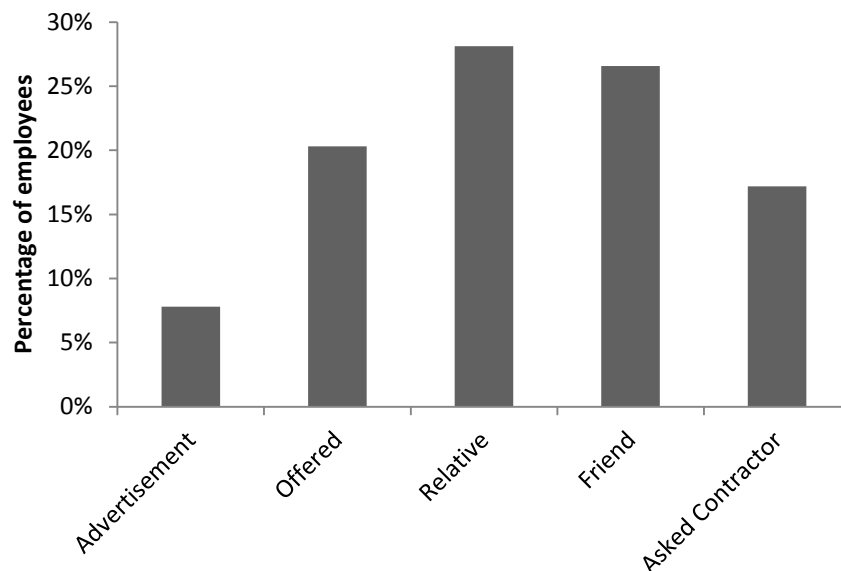


Figure 10: Recruitment processes

A majority of forestry employees have shown that their future intentions for employment lay with staying in the same job (Figure 11). The forestry industry looks as though they will be able to retain majority of these employees, with 77% of employees hoping to stay either within the same role or try another role in the same crew. A small proportion said they would have a career change (20%) and only 3%

of those surveyed suggested they would like to change crew or employer. If the industry can maintain such retention of employees, it will make training investments more beneficial for both employees and employers.

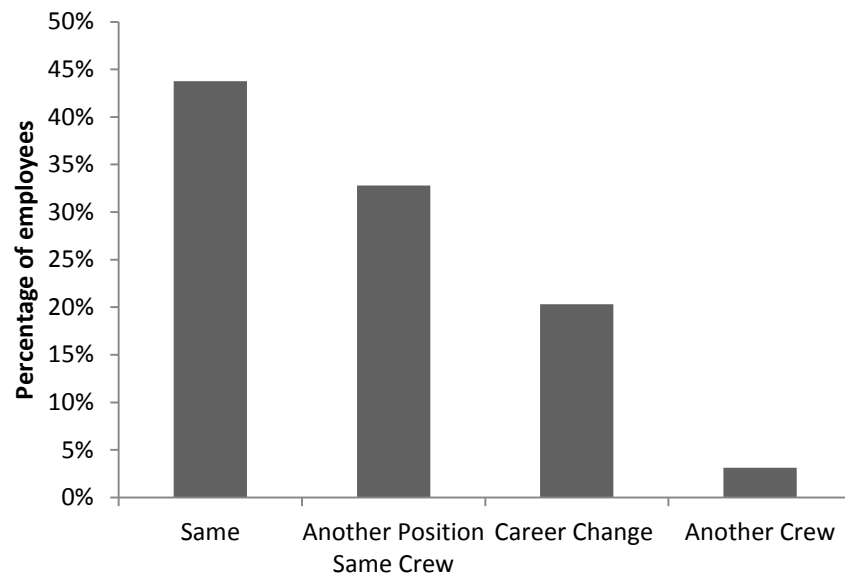


Figure 11: Forestry employee future employment intentions

Employees are shown to be most satisfied by the type of work, while pay and work environment are also major reasons of satisfaction among employees (Figure 12). Of the participants, 35% were most satisfied by the type of work, 25% by the pay they received for the work carried out and 24% satisfied by the work environment.

Employees were also evident to have been satisfied by the crew they were working in (10%) and daily travel time to work (6%).

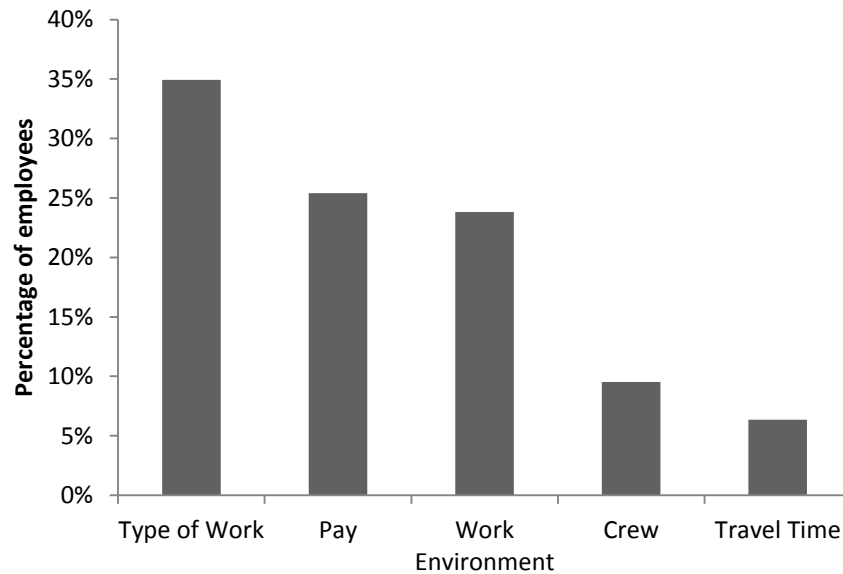


Figure 12: Employee reasons for satisfaction in employment

Dissatisfaction among employees is from a range of sources. The top three reasons for dissatisfaction among employees was shown to be due to the environment, pay and length of day, accounting for slightly less than 90% of the employee feedback (Figure 13). The feedback noted that the environment included the weather and terrain.

Travel time was shown to be of dissatisfaction among 5% of employees and 3% were dissatisfied by the crew that they were employed in.

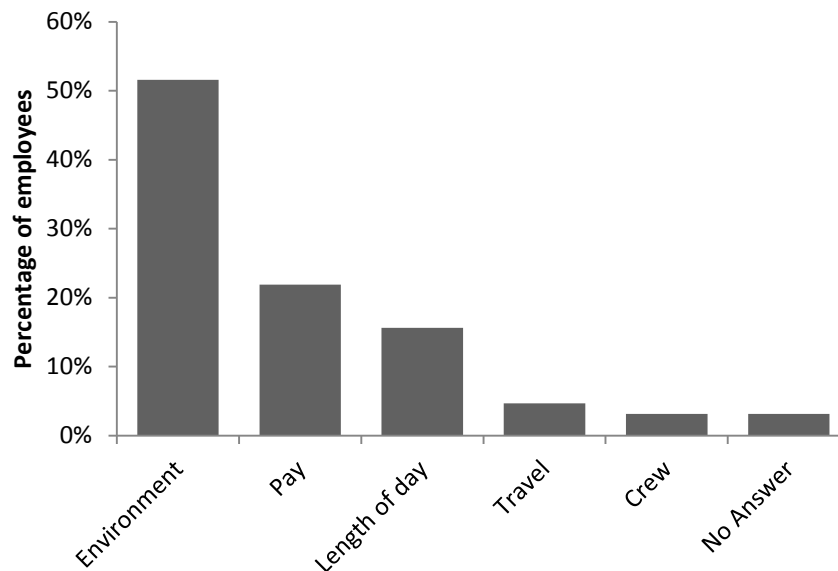


Figure 13: Employee reasoning for dissatisfaction

7.4 Safety

The frequency and occurrence of employees having near misses in their operational jobs is an indication of the level of safety in operational roles. For the majority (70%) of employees, it is shown that they have not had a recent near miss in their role (Figure 14). Slightly greater than 20% of employees that were surveyed said they have had a recent near miss, while there was a small proportion (8%) of respondents that failed to give an answer.

Further analysis to determine whether there was a statistical correlation between the roles employees were in and whether or not they had recent near misses was undertaken but little statistical significance was proven ($p=0.69$).

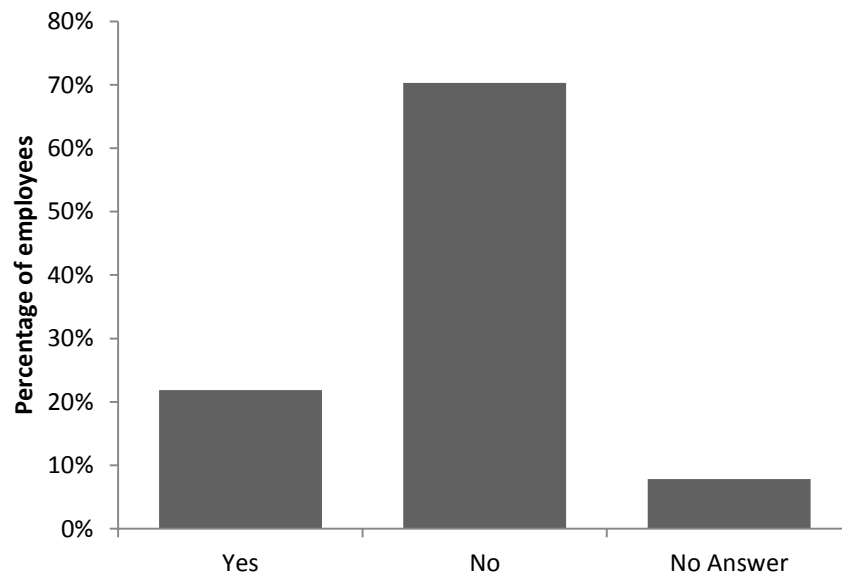


Figure 14: Employee recent near misses

A majority of employees (61%) have shown that they do not understand their responsibilities under the Approved Code of Practice (ACoP), while 39% had showed they did understand and provided examples (Figure 15). The ACoP understanding by employees will support that they have adequate knowledge and understanding of their operations to remain safe.

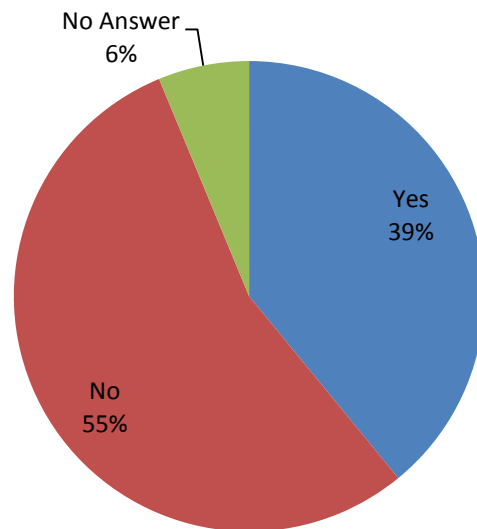


Figure 15: Employee Approved Code of Practice understanding

Employee responsibility is an important method toward improving the safety of forestry operations, as well as monitoring potentially dangerous situations. Daily tailgate meeting requirements are improving the reporting of hazardous situations in the workplace, where 45% of employees surveyed suggested they brought up issues daily (Figure 16). A further 33% suggested they reported weekly, while the remaining 20% of employees surveyed said they reported monthly on health and safety issues.

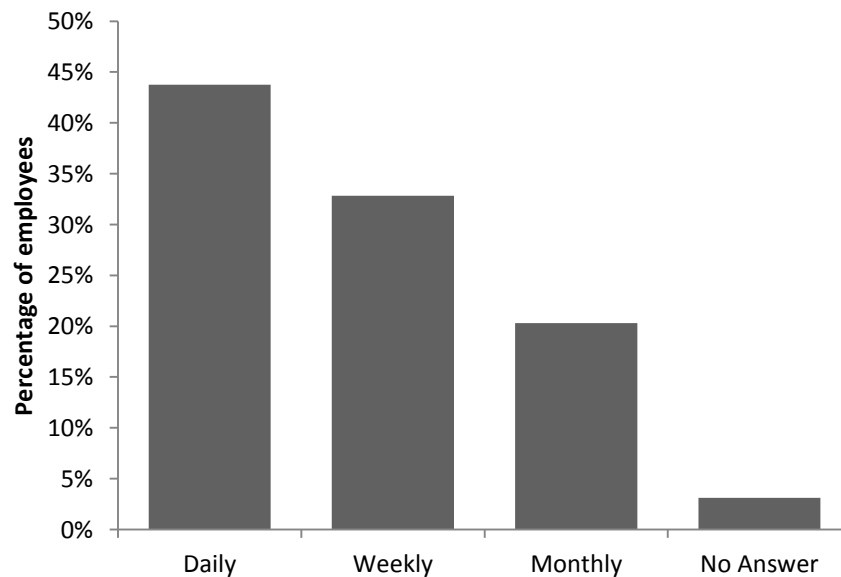


Figure 16: Employee rising of health and safety issue frequency

The safety of employees and how they feel is important for the improvement in health and safety statistics of individual companies and in the longer term, the overall industry. The safety among employees was largely shown to be positive, with the majority of employees showing to feel safe within their roles; however it is noted there is still some level of unsafe feeling (Figure 17).

Breaking out, thin to waste and pruning roles are areas where employees felt unsafe. All roles however, except loader operators, had some employees feeling only moderately safe. There was little significant correlation between the role employees were in and how safe they felt ($p= 0.20$).

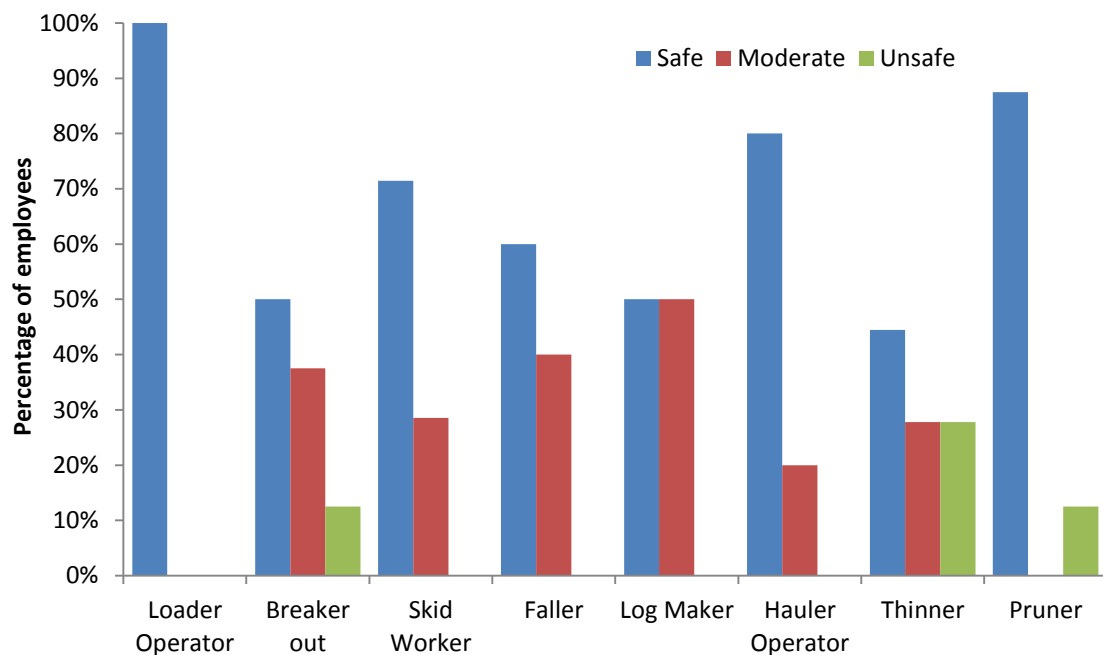


Figure 17: Employee feeling of safety in their job

8.0 Discussion

8.1 Training and Education

Employee training is important for providing employees with adequate knowledge and skills to ensure safety on site. Through this study, it was found that a significant proportion of employees have formal qualifications lower than those required to have undertaken further forestry training. The gap in the education limits or restricts employees from undertaking further training and ensuring they have the knowledge to undertake their role safely.

The forestry industry struggles to attract the right employees for operational roles. Training of employees has at times been ignored and employees may be limited to the amount of training they receive due to employers not willing to make the investment.

The analyses found, that around 60% of employees in the industry stay for periods greater than two years. This is supporting evidence that both the employers are getting repayment for their investment in training as well as providing employees with the required knowledge and skills to undertake their day to day role.

Ensuring employees are qualified and trained for the task they are undertaking is a way of ensuring they have been informed with the appropriate knowledge and skills to carry out their work safely. It was surprising to note, that there is a large proportion of operational staff that are still under training programs for the roles they were undertaking.

Forestry is a practical industry for operational employees, where they are outside exposed to the environment and either operating or interacting with machinery.

Requirements under the issued forestry Best Practice Guidelines (BPGs) suggest employees under training programs are supervised by a qualified and experienced individual. As such, it would be that only 20% of employees would be able to work to

their full productivity potential, taking into account the required 40% of qualified employees supervising the 40% of individuals under training.

A review of the formal training process should be undertaken as a method of improving the industries training participation. A move away from the focus of the academic training has the potential to be beneficial for the industry, particularly among those employees that find it difficult to complete the formal paper component of training, but are more than capable in the practical aspect of operational forestry.

8.2 Retention

Qualified and experienced forestry employees are sought after nationwide, particularly due to an increase in the national harvest volumes, as well as increased demands from other competing industries such as the Australian mining industry. Retention of trained and experienced employees in forestry needs to be a key focus for employers. Identifying reasons of dissatisfaction as well as ensuring a better person-to-job fit are two methods identified to potentially improve retention of employees.

The major reason of dissatisfaction among forestry employees was identified as the environment (52%). Although this was the major reason for dissatisfaction, paradoxically, it was also reasoning for a large proportion (35%) of employees of which they found their employment most satisfying. Employers cannot improve or change the environment that forestry work is in, but as the industry becomes more mechanised there will be a reduction to which employees' are exposed to the environment.

Although there was some level of dissatisfaction among employees with the work they are carrying out, a majority (77%) of those who completed surveys, suggested over the next two years, their intentions are to stay in the forestry industry, either in their current role or stay in the same crew but try another role. This sort of attitude

toward the future from forestry employees, suggests that majority of the training undertaken will be utilised with little loss of knowledge if employees change industry.

Employees that completed the survey showed two different trends in their length of time in the industry with the distribution having two noticeable spikes. One of the spikes was observed for employees that had been in the industry 1-5 years (39%) and the other for employees that have been in the forestry industry greater than 10 years (41%). The retention of employees with over 10 years' experience needs to be a focus, particularly as these employees have the knowledge, training and qualifications to ensure their own and others safety through day to day operations, as well as the ability to assist in the training of new employees.

The person-to-job fit has been a research focus for various industries including the construction industry overseas, however has not been a focus in New Zealand's forestry industry. Through the use of a job descriptions and person specification in the recruitment processes, it will be possible to more closely align employees into the roles they are most suited to, both physically and in terms of qualification requirements.

The use of a formal recruitment processes for forestry employees has the potential to be significantly beneficial to the industry in terms of closely fitting employees to the role in which they are most suited to. It is suggested to the industry, that a move toward more formal selection and recruitment processes will improve the person-to-job fit and therefore have benefits toward the retention of employees that are trained in the industry.

8.3 Safety

Over recent years the forestry industry has strongly lobbied to improve health and safety statistics, as high rates of accidents and fatalities have been evident. The overall feeling among employees surveyed was that they felt safe within their roles,

however there is some level of unsafe feeling among employees in breaking out, thin to waste and pruning roles.

There is a strong trend observed which suggests machine operators feel safe within their roles. However through further statistical analysis, it was shown there is little significance between the roles and how safe employees felt ($p=0.20$)

Along with ensuring employees have adequate training; understanding of the ACoP is another method of ensuring employee safety. The ACoP is also referred to as the bush code and identifies basic practical guidelines to ensure safe operations. It was noted that over half (55%) of those employees surveyed do not understand their requirements as outlined by the ACoP.

Implications of employees not realising their ACoP responsibilities include operational staff not having the basic knowledge to ensure their safety. It is suggested to employers and principal employers that they go over the employees' responsibilities and ensure they have a more comprehensive understanding. The document has been developed with the employees in mind, where it contains simple and practical guidelines which should be promoted and followed.

Employees raising health and safety issues is a method that allows employers and principal employers to work together to ensure a safer work place. Through regular communication, employees and employers will be able to approach potentially dangerous situations before they become a problem and work together to make improvements. It was encouraging to note that a large proportion of employees were willing to speak up when they felt there is health and safety issues, as required. A majority of employees (44%) said they were raising issues daily, at crew morning start up meetings.

A majority of the employees' felt safe within their roles, particularly with those operating machines. There was noted some unsafe feeling by employees in breaking out, thin to waste and pruning roles. It was surprising to note that no fallers said they felt unsafe within their roles, particularly with that role being of key focus in other national health and safety improvement programs. Ensuring employees

understand their ACoP requirements and raise health and safety issues as they see them should be promoted from both employers and principals to ensure they are able to make overall industry improvements.

8.4 Limitations

The survey was completed by all those employed in the JNL East Coast Estate, on the day their crew was surveyed. It was intended that all employees would complete the survey. There was inevitably a number of absentees when they surveys were completed. Crew foremen were given additional questionnaires to give to these employees, however no questionnaires were returned to be included in this analysis.

The survey was undertaken only within the operational staff of JNL's Estate and did not take into account other employees such as those in managerial roles. Because this study was focused within JNL's estate no other forestry companies or districts were included.

JNL have their own harvesting employees as well as contracting crews within the estate. It is unknown whether or not the employees that work for the contracting crews have formal job descriptions or person specifications and what they included. A potential limitation is that contractors' job descriptions and person specifications have different requirements and therefore this study was testing differently against contractor requirements.

A wider study sample would have been beneficial, particularly looking into different parts of the New Zealand. The forestry industry remains of strong importance nationwide, and therefore implementing the survey in different geographic locations has the potential to show alternative findings, in relation to the training, safety and retention of employees.

Participating employees may not have completely understood the survey and the questions being asked or may not have wanted to speak up about issues where

they thought was possible, due to the company undertaking the study rather than a third party.

There has been speculation that some employees in the forestry industry may be illiterate, however this was not considered at the time of undertaking the field analysis and therefore assumed that it was not an issue among those that participated in the study.

Some limiting issues were encountered during the data analysis process where individuals had given more than one answer or no answer. If this occurred and more than one answer was received, all were included for further analysis.

Employees were asked to state what their highest level of education was, however it is likely that there is some overlap between the indicated a qualification as employees' highest level of education in comparison to an overall NCEA qualification.

There were no major assumptions associated with the study.

8.5 Further Study

To allow for further study and a wider analysis, it is recommended that the same testing methods are implemented in other forestry regions of New Zealand. Implementation of the survey in a wider geographical range would allow the capture of more information and therefore stronger conclusions about the national forestry workforce could be drawn. Broadening the sample would allow for employees from other companies to participate.

Additional work on the developed job descriptions and person specifications could also be of significant benefit. They were developed in association with a range of stakeholders, however further input from different aspects of the industry could help develop these documents further

By further implementing the questionnaire into the field, it would be possible to gain a better understanding of the national forestry workforce.

Looking into the current accident rates and the role in which these are occurring in would be another area of further study which could be of significant benefit. This data specifically is publically unavailable, however through further analysis it may be possible to draw conclusions and correlations between the rate of accidents and the role the employees are in.

9.0 Conclusions

The forestry industry contributes significantly to the local economy. The importance of the industry domestically through employment is evident in communities; therefore providing employees with adequate training to ensure their safety proves to be invaluable. The review of forestry employees in New Zealand was undertaken to determine the level of training, how safe employees felt and the major reasons of dissatisfaction.

The level of formal education among employees is shown to be limited, with slightly more than half of the employees' having qualifications lower than that required for them to have successfully undertaken further forestry on-job training.

Through a more extensive application of job descriptions and person specifications during the recruitment and employment processes, it will be possible for employers to ensure that the employees being recruited have the personal attributes and qualifications as outlined in the job descriptions and person specifications.

There are a range of results from the survey that substantiate there is a problem in the industries training scheme, with a large proportion of employees (40%) still under training programs.

Restructuring the training scheme to have more on job, less academic based training will encourage more employees to undertake training and become qualified. Employees will be able to show they are competent to undertake their role safely and effectively in the field.

Employee safety is the key focus for all employers. There is increased public and government pressure following an industry wide Independent Safety Review. It is noted from respondents that a majority feel safe within their roles, however there are still some employees who feel unsafe, particularly those in breaking out, thin to waste and pruning roles.

Person-to-job fit and satisfaction are key contributing factors affecting employee retention. Reasons for dissatisfaction among employees lay dominantly with the environment while pay and length of day are also important. Rectifying some of the dissatisfaction among forest employees has the potential to improve employee satisfaction and thereby further improve employee retention.

Although a majority of those employees surveyed had some reason for workplace dissatisfaction, their overall intentions are to stay in the forestry industry either in their current roles or another role in the same crew.

The forestry industry is centred around a variable and sometimes difficult environment. Employers and employees have the responsibility to ensure everyone onsite is safe in their role. Revision of the national training scheme will assist employees to be able to complete further on-job training, and ensure they are equipped with the appropriate knowledge and understanding to undertake their job more effectively and safely.

The forestry industry is becoming increasingly important nationwide, with a strong dependence on trained and experienced employees. By providing adequate training to employees, employers are taking all practical steps to ensure a safe workplace for all those involved.

10.0 References

- Ajzen, I. (2011). Job Satisfaction, Effort, and Performance: A Reasoned Action Perspective *Contemporary Economics*, 5(4), 32-43.
- Behery, M. (2009). Person/organization job-fitting and affective commitment to the organization. *Cross Cultural Management: An International Journal*, 16(2), 179-196.
- Bell, J., & Grushecky, S. (2006). Evaluating the effectiveness of a logger safety training program. *Journal of Safety Research*, 37, 53-61.
- Cryer, P., & Fleming, C. (1987). A review of work-related fatal injuries in New Zealand 1975-1984 - numbers, rates and trends. *The New Zealand Medical journal* 100(816), 1-5.
- Garland, J. (1987). *Selection, Training and Motivation of the Logging Labor Force*. Paper presented at the 9th Annual Council on Forest Engineering (COFE) Meeting, Alabama.
- Garland, J. (1989). *Forest Harvesting Training Issues in the United States of America*. Paper presented at the Forestry Training Programme, Helsinki, Finland.
- Garland, J. (1990). *Observations on the Logging Labor Forces of the Nordic Countries and the U.S.* Paper presented at the Council on Forest Engineering, North Carolina.
- Garland, J. (1991). *Machine Operator Selection and Training*. Forest Engineering Department. Oregon State University.
- MacSweeney. (2013). Value Assets: Skimping on IT Training Is Cost. Retrieved from Wall Street & Technology website:
- Mosely, C., & Reyes, Y. (2007). Comparing Job Quality in Logging and Forestry Services in Oregon. *Journal of Forestry*.
- Nikolaou, I. (2003). Fitting the person to the organisation: examining the personality-job performance relationship from a new perspective. *Journal of Managerial Psychology*, 18(7), 639-648.
- Sandhya, K., & Kumar, P. (2011). Employee retention by motivation. *Indian Journal of Science and Technology*, 4(12), 1778-1782.
- Slappendel, C., Laird, I., Kawachi, I., Marshall, S., & Cryer, C. (1993). Factors Affecting Work-Related Injury Among Forestry Workers: A Review. *National Safety Council and Pergamon Press Ltd.*, 24, 19-32.
- Wang, J., & Kleiner, B. (2004). Effective Employment Screening Practices. *Management Research News*, 4(5), 99-107.

11.0 Appendices

11.1.1 Breaker out Job Description

Role:	Breaker Out		
Immediate Manager:	Crew Foreman	Supervisor:	Company Supervisor
Role Purpose:	<ul style="list-style-type: none"> → To hook up logs in a safe manner as identified for the system being used. → Set up ropes to ensure safe and efficient line changes. → Maximise productivity of the crew planning each drag. 		

Role Dimensions:	<ul style="list-style-type: none"> → Strong health and safety mindset throughout the day in all practice. → Ensure own training is up to date and sufficient for the task to be carried out safely. → Ensure drag volume maximises utilisation of the machine capacity. → Hook up logs in a way that is most productive as well as being aware of minimising equipment damage. → Ability to forward think to ensure line shifts are planned ahead to maintain production rates. → Ability to effectively communicate with the yarder and loader operators to ensure drags are safely landed in the chute. → Report environmental incidents and monitor any changes, reporting as required. → Ensure other duties carried out as directed impose no potential harm to yourself and others.
------------------	---

Direct Accountabilities	
Technical Accountabilities	This includes direct output of work appropriate to the role, developing technical knowledge, establishing and monitoring technical systems, and managing stakeholder relationships. Specific technical accountabilities include:
1	Recognise your individual and crews responsibilities as specified in the ACoP and IMS standards for safety.
2	Ability to undertake other forestry roles as required, ensuring they are carried out in a way that doesn't put yourself or others in danger

Scheduling Accountabilities	This includes preparing plans and monitoring performance against harvest plans, developing and managing the extraction processes used achieve the required output of the crew. Specific scheduling accountabilities include:
1	Record any health and safety or environmental incidents and issues to your immediate supervisor.
2	Assist foreman and/or supervisor in the planning and development of extraction operations to ensure maximisation of productivity and efficiency.
People Accountabilities	This includes managing direct reports, setting the environment for the rest of the crew to perform in their particular role, and developing capabilities of team members and self. The specific people accountabilities include:
1	Actively participate in all crew activities, including personal skills training, departmental safety meetings or other activities as may be directed.
2	Effectively communicate with the yarder operator and crew onsite to ensure the safety of yourself and others.
3	Accept personal responsibility for following up on training and development needs to ensure safety and production in carrying out specified tasks.
4	Meet or exceed all health and safety and environmental standards as specified in the IMS and ACoP, ensuring the safety and well-being of yourself and others.

Role Authorities
<ul style="list-style-type: none"> → Identify health and safety issues and ensure the required paper work is completed along with any remediation of the problem to reduce the risk. → Identify any environmental or community issues and rectify with either crew foreman or supervisor. → Identify any issues with the site and terrain and communicate methods of rectifying the issues to ensure safety and productivity.

Direct Reports
Yarder operator, crew, foreman and company supervisor.
Role Relationships

Internal	<ul style="list-style-type: none"> – Daily liaison with crew foreman and crew members. 	External	<ul style="list-style-type: none"> – Liaison with crew company supervisor in due course.
----------	---	----------	---

11.1.2 Faller Job Description

Role:	Feller		
Immediate Manager:	Crew Foreman	Supervisor:	Company Supervisor
Role Accountabilities:	<ul style="list-style-type: none"> – To carry out assigned feller duties to achieve consistently high health and safety standards. – To fall trees in a safe and productive manner to maximise potential value and volume recovery from the stand. 		

Role Dimensions	<ul style="list-style-type: none"> – Work with your foreman to safely carry out the tree falling within the specified direction. – Produce a layout from settings as directed by the crew foreman. – Ensure felling methods optimise the potential value recovery from the wood resource through minimising breakage and maximising extraction potential. – Ensure all felling at a minimum meets the companies IMS requirements for health and safety, environmental and community standards. – Understand the operation and methods of extraction to ensure the layout maximises machinery utilisation. – Ensure other duties that are carried out as directed, impose no potential harm to yourself and others. – Chainsaw operation and maintenance. – Participate in annual fire safety training and ensure awareness.
-----------------	---

Direct Accountabilities	
Technical Accountabilities	This includes direct output of work appropriate to the role, developing technical knowledge, monitoring technical systems, and managing stakeholder relationships. Specific technical accountabilities include:
1	Recognise your individual and crew responsibilities as specified in the ACoP and IMS standards.
2	Have the ability to undertake other forest roles as required, ensuring they are carried out in a way that doesn't put yourself or others in danger.
Scheduling Accountabilities	This includes preparing plans and monitoring performance against harvest plans, developing and managing the cutting layout and scheduling work to achieve the required output of the team.

	Specific scheduling accountabilities include:
1	Record any health and safety or environmental incidents and issues to your immediate supervisor.
2	Assist foreman in the planning of felling/extraction operations.
People Accountabilities	This includes managing direct reports, setting the environment for the rest of the crew to perform in their particular role, and developing capabilities of team members and self. The specific people accountabilities include:
1	Actively participate in all crew activities including, personal skills training, departmental safety meetings or other activities as may be directed.
2	Effectively communicate on daily felling operations with the crew foreman to ensure planned priorities are achieved.
3	Accept personal responsibility for following up on training and development needs to ensure safety and production in carrying out specified tasks.
4	Meet or exceed all health and safety and environmental standards as specified in the IMS and ACoP.

Role Authorities
<ul style="list-style-type: none"> → Identify health and safety issues and ensure the required paper work is completed along with any remediation of the problem to reduce the risk. → Identify any environmental or community issues and rectify with either crew foreman or supervisor.

Direct Reports
Crew foreman and supervisor.

Role Relationships			
Internal	<ul style="list-style-type: none"> → Daily liaison with crew foreman and crew members. 	External	<ul style="list-style-type: none"> → Liaison with crew company supervisor or in due course.

11.1.3 Log Maker Job Description

Role:	Log Maker		
Immediate Manager:	Crew Foreman	Supervisor:	Company Supervisor

Role Purpose:	<ul style="list-style-type: none"> → To carry out assigned log making duties with a consistent health and safety mind set. → To maximise value and volume recovery from logs to the specified cut plan.
---------------	---

Role Dimensions:	<ul style="list-style-type: none"> → Work with your foreman and supervisor to ensure specified safety standards are maintained. → Implement the companies IMS policy for safety and environmental management, ensuring sound understanding of individual responsibility. → Ensure cut plan as specified is accurately followed to maximise value recovery and ensure customer orders are met. → Carry out quality control of log stacks to ensure high quality product is delivered to the customer. → Assist with continuous improvement through training, work studies and value recovery. → Ensure other duties carried out as directed impose no potential harm to yourself and others. → Chainsaw operation and maintenance.
------------------	--

Direct Accountabilities	
Technical Accountabilities	This includes direct output of work appropriate to the role, developing technical knowledge, establishing and monitoring technical systems, and managing stakeholder relationships. Specific technical accountabilities include:
1	Recognise your individual and crews responsibilities as specified in the ACoP and IMS standards for safety.
2	Ability to assist in other roles as required, ensuring other roles are carried out in a way that does not put yourself or others in potential danger.
Scheduling Accountabilities	This includes preparing plans and monitoring performance against cut plans, developing and managing the cross-cutting strategy to achieve the required output of the crew. Specific scheduling accountabilities include:

1	Record any health and safety, environmental and community incidents and issues to your immediate supervisor.
2	Assist foreman and/or supervisor in the planning and development of daily and weekly log making operations to ensure maximise value recovery.
People Accountabilities	This includes managing direct reports, setting the environment for the rest of the crew to perform in their particular role, and developing capabilities of team members and self. The specific people accountabilities include:
1	Actively participate in all crew activities, including personal skills training, departmental safety meetings or other activities as may be directed.
2	Effective communication on daily production of the specified logs to specified people.
3	Accept personal responsibility for following up on training and development needs to ensure safety and production in carrying out specified tasks.
4	Meet or exceed all health and safety and environmental standards as specified in the IMS and ACoP systems.

Role Authorities
<ul style="list-style-type: none"> → Identify health and safety issues and ensure the required paper work is completed along with any remediation of the problem to reduce the risk. → Identify any environmental or community issues and rectify with either crew foreman or supervisor. → Identify any issues with the cut plans and available wood resource and communicate ideas with appropriate personnel.

Direct Reports			
Crew foreman and company supervisor.			
Role Relationships			
Internal	→ Daily liaison with crew foreman and crew members.	External	→ Liaison with crew company supervisor in due course.

11.1.4 Skid Worker Job Description

Role:	Skid Worker		
Immediate Manager:	Crew Foreman	Supervisor:	Company Supervisor

Role Purpose:	<ul style="list-style-type: none"> → To carry out the assigned cross cutting strategy with a continuously strong health and safety mindset. → Maximise utilisation and value recovery of the available wood resource. → Cut stems accurately into logs, following guidance from log maker.
---------------	---

Role Accountabilities:	<ul style="list-style-type: none"> → Work with crew foreman, loader operators and log makers to ensure the safety of yourself and others onsite. → Maximisation of productivity for the crew through efficient cross cutting strategies. → Effectively communicate with surrounding machinery to ensure safe working space at all times. → Implement the companies IMS policy for safety and environmental management, ensuring sound understanding of individual responsibility. → Understand the grades that are being cut to ensure maximum value recovery. → Quality control log stacks to ensure customer demands are met. → Assist with general skid work as required. → Carry out fire safety and ensure awareness with the crew at the work site and also for the forest at large. → Competent with chainsaw operation and maintenance.
------------------------	--

Direct Accountabilities	
Technical Accountabilities	This includes direct output of work appropriate to the role, developing technical knowledge, establishing and monitoring technical systems, and managing stakeholder relationships. Specific technical accountabilities include:
1	Recognise your individual and crew responsibilities as contained in the ACoP and IMS.
2	Have the ability to assist in other roles onsite as required ensuring there is no additional imposed risks to yourself and others onsite.

3	Ability to competently and confidently carry out chainsaw work and maintenance, ensuring the highest safety standards are achieved.
Scheduling Accountabilities	This includes preparing strategic and action plans and monitoring performance against cut plans, developing and managing the cross-cutting strategy to achieve the required output of the crew. Specific scheduling accountabilities include:
1	Record any health and safety and environmental incidents and issues to your immediate supervisor in a timely manner.
2	Assist the log-maker in determining the grades that can potentially be cut from the available resource, maximising volume and value recovery.
3	Schedule maintenance of chainsaw and personal protective equipment as required for ensure safety and productivity maximisation.
People Accountabilities	This includes managing direct reports, setting the environment for the rest of the crew to perform in their particular role, and developing capabilities of team members and self. The specific people accountabilities include:
1	Actively participate in all crew activities, including personal skills training, departmental safety meetings or other activities as may be directed.
2	Effectively communicate on day-to-day production rates along with any limitations on production and identify methods of remediation.
3	Accept personal responsibility for following up on training and development needs to ensure safety and production in carrying out specified tasks.
4	Meet or exceed all health and safety and environmental standards as specified in the IMS and ACoP, ensuring the safety and well-being of yourself and others onsite.

Role Authorities
<ul style="list-style-type: none"> → Identify health and safety issues and ensure the required paper work is completed along with any remediation of the problem to reduce the risk. → Identify any environmental or community issues and rectify with either crew foreman or supervisor. → Identify any issues with the cut plans and available wood resource. → Quality control log makers' decisions to ensure value and volume recovery maximisation in a safe manner.
Direct Reports

Log maker, loader operator, and crew foreman and company supervisor.

Role Relationships			
Internal	→ Daily liaison with crew foreman and crew members.	External	→ Liaison with crew company supervisor in due course.

11.1.5 Loader Operator Job Description

Role:	Loader Operator		
Immediate Manager:	Crew Foreman	Supervisor:	Company Supervisor

Role Purpose:	<ul style="list-style-type: none"> → Clear the chute of stems and fleet stems and logs on the deck in a safe manner, taking into consideration surrounding people and machinery. → Ensure operations don't negatively impact the productivity of other machines or personnel onsite. → Fleet logs on the skid, overlooking log quality and loading out appropriate grades as specified by the cut plan.
---------------	--

Role Dimensions:	<ul style="list-style-type: none"> → Work with your crew foreman, yarder operator and skid workers to ensure safety of everyone onsite. → Strong health and safety mindset, ensuring the safety of yourself and others onsite. → Implement the companies IMS policy for safety and environmental management, ensuring sound understanding of individual responsibility. → Effectively communicate using a radio with the crew and external personal. → Understand the grades that are being cut on the skid and fleet them into the appropriate stacks. → Communicate with dispatch and log trucks to ensure accuracy of loading out operations. → Load out log trucks safely and efficiently. → Shovel logs where appropriate to assist extraction efficiency. → Basic machine understanding for servicing, refueling, diagnostics and minor repairs. → Significant environmental consideration when positioning slash and other debris onsite, surrounding the skid that it does not pose additional threat.
------------------	--

Direct Accountabilities	
Technical Accountabilities	This includes direct output of work appropriate to the role, developing technical knowledge, establishing and monitoring technical systems, and managing stakeholder relationships. Specific technical accountabilities include:

1	Recognise your individual and crews responsibilities as specified in the ACoP and IMS standards.
2	Have the ability to understand the layout of the skid whilst maintaining safety of surrounding personnel. Maintain awareness of surrounding machinery.
3	Conduct required pre-start machinery checks and ensure maintenance is up to date.
Scheduling Accountabilities	This includes preparing plans and monitoring performance against harvest plans, developing and managing fleeting and the loading scheduling work to achieve the required output of the crew. Specific scheduling accountabilities include:
1	Record any health and safety, environmental or community incidents and issues to your immediate supervisor.
2	Assist in scheduling log trucks based on daily productivity of the crew. Ensure these trucks are scheduled to meet customer demands in a timely manner.
3	Keep track of the scheduled maintenance requirements of the machine to ensure up to date. Assist with yarder maintenance schedule as required.
4	Ability to undertake early work starts as required by the scheduling of log trucks, working alone.
People Accountabilities	This includes managing direct reports, setting the environment for the rest of the crew to perform in their particular role, and developing capabilities of team members and self. The specific people accountabilities include:
1	Actively participate in all crew activities, including personal skills training, departmental safety meetings or other activities as may be directed.
2	Effectively communicate with the yarder operator, log trucks and log base as required to safely complete specified tasks (clearing chute, loading trucks and communication with the log base).
3	Accept personal responsibility for following up on training and development needs to ensure safety and production in carrying out specified tasks.
4	Meet or exceed all health and safety and environmental standards as specified in the IMS and ACoP.

Role Authorities

- Identify health and safety issues and ensure the required paper work is completed along with any remediation of the problem to reduce the risk.
- Identify any environmental or community issues and rectify with either crew foreman or supervisor.
- Assist in planning skid layout to ensure everyone can effectively, safely and efficiently carry out their specified tasks.

Direct Reports

Yarder operator, breaker outs, log makers, skid workers, crew foreman, log truck driver, log base and crew supervisor.

Role Relationships

Internal	<ul style="list-style-type: none"> → Daily liaison with crew foreman and crew members 	External	<ul style="list-style-type: none"> → Liaison with external log truck operators. → Dispatch communication → Liaison with company supervisor in due course.
----------	--	----------	--

11.1.6 Hauler Operator Job Description

Role:	Yarder Operator		
Immediate Manager:	Crew Foreman	Supervisor:	Company Supervisor

Role Purpose:	<ul style="list-style-type: none"> → Extract logs from the cut over to a skid site in a safe manner, taking into consideration all personnel surrounding the work area. → Maintain communication with the breaker outs and pole man to ensure work area is safe. → Ensure understanding of the system being applied to maximise productivity and maximising productive machine hours.
---------------	--

Role Accountabilities:	<ul style="list-style-type: none"> → Work with your crew to ensure you can safely extract stems from the cut over to the skid. → Communicate effectively with the breaker outs to ensure their safety using radio or any other method. → Control the direction, speed plus braking of cable drums to accurately position chokers or grapple over logs. → Ensure maximisation of the potential productivity of the machine. → Undertake required maintenance and inform the crew foreman of any additional issues. → Ability to forward plan the operation, thinking about line shifts and rigging configurations being used. → Understand the capabilities of the machine in operation and able to rig up various systems where required. → Ensure all environmental reporting is up to date and suffice for the operation. → Carry out fire safety and ensure awareness with the crew at the work site and also for the forest at large.
------------------------	--

Direct Accountabilities	
Technical Accountabilities	This includes direct output of work appropriate to the role, developing technical knowledge, establishing and monitoring technical systems, and managing stakeholder relationships. Specific technical accountabilities include:
1	Recognise your individual responsibilities as contained in the IMS and ACoP.

2	Have the ability to rig up the yarder and change systems as required. Ability to assist out of the yarder cab also as necessary.
3	Understand the mechanical components of the machine and be able to undertake basic machine maintenance.
Scheduling Accountabilities	This includes preparing plans and monitoring performance against harvest plans, developing and managing the cutting layout and scheduling work to achieve the required output of the team. Specific scheduling accountabilities include:
1	Record any health and safety or environmental incidents and issues to your immediate supervisor and fill in any required paper work.
2	Assist the foreman in any planning of production and system identification, most effective for the area being harvested.
3	Ability to keep track of the day to day production levels and monitoring of set target production.
People Accountabilities	This includes managing direct reports, setting the environment for the rest of the crew to perform in their particular role, and developing capabilities of team members and self. The specific people accountabilities include:
1	Actively participate in all crew activities, including personal skills training, departmental safety meetings or other activities as may be directed.
2	Effectively communicate with the breaker outs, pole man and loader operators to ensure a safe and productive environment is achieved.
3	Accept personal responsibility for following up on training and development needs to ensure safety and production in carrying out specified tasks.
4	Meet or exceed all health and safety and environmental standards as specified in the IMS and ACoP, ensuring the safety and well-being of yourself and others onsite.

Role Authorities
<ul style="list-style-type: none"> → Identify health and safety issues and ensure the required paper work is completed along with any remediation of the problem to reduce the risk. → Identify any environmental or community issues and rectify with either crew foreman or supervisor. → Assist in setting up to ensure maximisation of safety of the crew, and also maximising productivity of the crew. → Schedule required servicing and maintenance as machine demands.

Direct Reports
Breaker outs, loader operator, crew foreman and crew supervisor.

Role Relationships			
Internal	→ Daily liaison with crew foreman and crew members.	External	→ Liaison with crew company supervisor in due course. → External service providers.

11.1.7 Thin-to-waste Job Description

Role:	Thinner – thin to waste		
Immediate Manager:	Crew Foreman	Supervisor:	Company Supervisor

Role Purpose:	<ul style="list-style-type: none"> → To carry out day-to-day thinning duties achieving a constantly high health and safety standard. → Maximises the potential crop value through achieving a uniform stand and no damage to final crop trees.
---------------	--

Role Dimensions:	<ul style="list-style-type: none"> → Work with your foreman to safely carry out the thinning operation to the specifications as identified by the prescription. → Produce and layout which will minimise damage to crop trees. → Implement the companies IMS policy for safety and environmental management, ensuring sound understanding of individual responsibility. → Carry out thinning duties to the appropriate standard whilst working effectively with the crew. → Assist with continuous improvement through training, work studies and value recovery. → Able to carry out your task with minimal supervision. → Competent with assisting in other forestry tasks ensuring carrying them out doesn't impose any additional potential harm. → Carry out fire safety and ensure awareness with the crew at the work site and also for the forest at large. → Competent with chainsaw operation and maintenance.
------------------	---

Direct Accountabilities

Technical Accountabilities	This includes direct output of work appropriate to the role, developing technical knowledge, establishing and monitoring technical systems, and managing stakeholder relationships. Specific technical accountabilities include:
----------------------------	--

1	Recognise your individual and crews responsibilities as contained in the ACoP and IMS.
2	Have the ability to undertake other forest roles as required. Ensure undertaking the tasks does not impose additional risks to yourself and others.
Scheduling Accountabilities	This includes preparing plans and monitoring performance developing and managing the cutting layout and scheduling work to achieve the required output of the team. Specific scheduling accountabilities include:
1	Record any health and safety or environmental incidents and issues to your immediate supervisor.
2	Assist in planning of day-to-day thinning operations to ensure thinning operations are carried out in a systematic order to ensure safety and productivity.
3	Assist in forward planning, for determining crew planning to ensure productivity targets are met.
People Accountabilities	This includes managing direct reports, setting the environment for the rest of the crew to perform in their particular role, and developing capabilities of team members and self. The specific people accountabilities include:
1	Actively participate in all crew activities, including personal skills training, departmental safety meetings or other activities as may be directed.
2	Effectively communicate with crew foreman the day-to-day productivity.
3	Accept personal responsibility for following up on training and development needs to ensure safety and production in carrying out specified tasks.
4	Meet or exceed all health and safety and environmental standards as specified in the IMS and ACoP.

Role Authorities
<ul style="list-style-type: none"> → Identify health and safety issues and ensure the required paper work is completed along with any remediation of the problem to reduce the risk. → Identify any environmental or community issues and rectify with either crew foreman or supervisor.

Direct Reports
Crew foreman and supervisor.

Role Relationships			
Internal	<ul style="list-style-type: none"> – Daily liaison with crew foreman and crew members. 	External	<ul style="list-style-type: none"> – Liaison with crew company supervisor in due course.

11.1.8 Pruner Job Description

Role:	Pruner		
Immediate Manager:	Crew Foreman	Supervisor:	Company Supervisor

Role Purpose:	<ul style="list-style-type: none"> → To carry out day-to-day pruning duties achieving a constantly high health and safety standard. → Ensure the quality of workmanship being carried out meets or exceeds the standards as set out in the current prescription. → To prune trees to maximise the potential future value of the resource and selection trees that are going to provide a uniform stand.
---------------	--

Role Dimensions:	<ul style="list-style-type: none"> → Work with your crew foreman to safely carry out pruning operation for the specified site. → Ensure all pruning activities meet or exceed the companies IMS requirements at a consistently high health and safety, environmental and community standard. → Be able to carry out the task with minimal supervision. → Competent with assisting in other forestry tasks ensuring carrying them out doesn't impose any additional potential harm. → Chainsaw operation and maintenance as may be required for pruning or other specified tasks.
------------------	---

Direct Accountabilities	
Technical Accountabilities	This includes direct output of work appropriate to the role, developing technical knowledge, establishing and monitoring technical systems, and managing stakeholder relationships. Specific technical accountabilities include:
1	Recognise your individual and crews responsibilities as contained in the ACoP and IMS standards for safety.
2	Have the ability and willingness to undertake other forest roles as required.
Scheduling Accountabilities	This includes preparing plans and monitoring performance against harvest plans, developing and managing the pruning spacing layout and scheduling work to achieve the required output of the team. Specific scheduling accountabilities include:

1	Record any health and safety or environmental incidents and issues to your immediate supervisor.
2	Assist in the planning of daily movements in the pruning operations and determining the productivity of the crew.
3	Ability to keep individual work progress and report back to the supervisor. Work toward targets daily as set by the crew supervisor.
People Accountabilities	This includes managing direct reports, setting the environment for the rest of the crew to perform in their particular role, and developing capabilities of team members and self. The specific people accountabilities include:
1	Actively participate in all crew activities, including personal skills training, departmental safety meetings or other activities as may be directed.
2	Effectively communicate with crew foreman the productivity of yourself, ensuring plans can be established and priority areas can be identified.
3	Accept personal responsibility for following up on training and development needs to ensure safety and production in carrying out the specified tasks.
	Meet or exceed all health and safety and environmental standards as specified in the IMS and ACoP.

Role Authorities
<ul style="list-style-type: none"> → Identify health and safety issues and ensure the required paper work is completed along with any remediation of the problem to reduce the risk. → Identify any environmental or community issues and rectify with either crew foreman or supervisor.

Direct Reports
<ul style="list-style-type: none"> → Crew, crew foreman and supervisor.

Role Relationships

Internal	<ul style="list-style-type: none"> – Daily liaison with crew foreman and crew members. 	External	<ul style="list-style-type: none"> – Liaison with crew company supervisor in due course.
----------	---	----------	---

11.2.1 Breaker out Person Specification

Person Specifications
Operation: Logging
Role: Breaker out

TRAINING

	Induction
	Basic first aid
	Basic fire unit standards
	On-the-job training for the specified task – National Unit Standard qualifications with unit 22994 included in the training program

PRE-EMPLOYMENT REQUIREMENTS

	Pre-employment drug test
	Pre-employment medical test

PERSONNEL SPECIFICATIONS

Attributes	Relevant Criteria	How Identified	Rank (E/D)
<i>Experience/Knowledge</i>	Experience and understanding of the methods that can be applied onsite to ensure maximum safety	A/T	E
	Knowledge of the operation and the methods that can be applied to maximise productivity	I/T	E
	Have been deemed competent for the task, or under supervision	T	E
<i>Skills</i>	Ability to forward plan to ensure line changes are expected and set up in advance	T	E
	Ability to be flexible in the various roles within a logging crew	I/T	E
	Understand potentially dangerous situations, isolate or remediate	T	E

	the problem as appropriate and file required paper work.		
<i>Attributes</i>	Willingness to learn	I/T	E
	Ability to maintain constant and effective communication with appropriate personnel	I/T	E
	Work safely and efficiently as a team with other breaker outs	I/T	E
	Ability to make sound judgment and use initiative when appropriate	T	E
	Ability to forward think, planning extraction while waiting for break out and return of the rigging	I/T	E
<i>Education/Training and Qualifications</i>	Hold the required unit standards/ national certificates or be undertaking formal training for the task	A/I	E
<i>Other Requirements</i>	Able to work unsocial hours including early mornings, evenings and weekends	I	E
	Understand and comply with legal requirements as outlined in the Health and safety in employment act.	A/I/T	E
	Understand recording requirements for health and safety and environmental incidents	I/T	E

Rank: E = essential

D= desirable

How identified: A= application/CV
the job

I=interview

T=test/time in

PHYSICAL ATTRIBUTES

Aspects are rated on a 0-4 scale (considering frequency and importance)

0 – None

1-Low

2-Moderate

3-High

4-Very

High

Physical Requirements	0	1	2	3	4
Climbing into machinery		⊗			
Hearing					⊗
Lifting					⊗
Working bent			⊗		
Use of arms					⊗
Use of legs					⊗
Use of feet					⊗
Walking					⊗
Standing				⊗	
Sitting		⊗			
Vision (sight)					⊗
Colour distinction				⊗	
Depth perception					⊗
Eye/hand/foot co-ordination					⊗
Bio-mechanical	0	1	2	3	4
Action repeating			⊗		
High physical					⊗

Working Environment	0	1	2	3	4
High temperature					⊗
Low temperature					⊗
Noise				⊗	
Humidity				⊗	
Dampness					⊗
Vibration		⊗			
Height		⊗			
Abnormal positions			⊗		
Working Conditions	0	1	2	3	4
Exhaust fumes		⊗			
Dust			⊗		
Hazardous substances		⊗			
Special Requirements	0	1	2	3	4
Use of personal protective equipment					⊗
Possible noise exposure			⊗		

11.2.2 Faller Person Specification

Person Specifications
Operation: Logging Operation
Role: Feller

TRAINING

	Induction
	Basic first aid
	Basic fire unit standards
	On-the-job training for the specified task – National Unit Standard qualifications with unit 22994 included in the training program

PRE-EMPLOYMENT REQUIREMENTS

	Pre-employment drug test
	Pre-employment medical test

PERSONNEL SPECIFICATIONS

Attributes	Relevant Criteria	How Identified	Rank (E/D)
<i>Experience/Knowledge</i>	Experience and understanding of the methods that can be applied to ensure maximum safety	A/T	E
	Experience and understanding of chainsaw use and safety	A/T	E
	Knowledge of the extent of impact felling operations can have on extraction productivity	I/T	E
	Have been deemed competent for the task at hand, or ensure required supervision is obtained	T	E
<i>Skills</i>	Ability to use and maintain personal	A/I/T	E

	chainsaw		
	Ability to be flexible in the various roles on a logging site – undertaking and assisting in tasks as required	I/T	D
	Understand potentially dangerous situations, isolate or remediate as appropriate	T	E
<i>Attributes</i>	Willingness to learn	I/T	E
	Ability to maintain constant and effective communication	I	E
	Ability to make sound judgment and use initiative where appropriate	I/T	E
	Work individually or as a team to achieved specified targets	T	E
	Ability to forward think, planning and developing plans for felling and extraction	I/T	E
<i>Education/Training and Qualifications</i>	Hold the required unit standards/national certificates or be undertaking formal training for the task	A/I	E
	Hold appropriate chainsaw units, ensuring competency for operation	A/I	E
<i>Other Requirements</i>	Own and maintain personal chainsaw as required	A	E
	Able to work unsocial hours including early mornings, evenings and weekends	I	E
	Hold the appropriate driver's license for the vehicle/machine you are required to operate	A/I	E

	Understand and comply with legal requirements as outlined in Health and safety in employment act.	A/I/T	E
	Understand recording requirements for health and safety and environmental incidents	I/T	E

Rank: E = essential

D= desirable

How identified: A= application/CV
the job

I=interview

T=test/time in

PHYSICAL ATTRIBUTES

Aspects are rated on a 0-4 scale (considering frequency and importance)

0 – None
High

1-Low

2-Moderate

3-High

4-Very

Physical Requirements	0	1	2	3	4
Climbing into machinery		⊗			
Hearing				⊗	
Lifting					⊗
Working bent					⊗
Use of arms					⊗
Use if legs					⊗
Use of feet					⊗
Walking					⊗
Standing					⊗

Sitting		⊗			
Vision (sight)					⊗
Colour distinction				⊗	
Depth perception					⊗
Eye/hand coordination					⊗
Bio-mechanical	0	1	2	3	4
Action repeating					⊗
High physical exertion					⊗
Working Environment	0	1	2	3	4

High temperature				⊗	
Low temperature				⊗	
Noise					⊗
Dampness				⊗	
Vibration					⊗
Height		⊗			
Abnormal positions				⊗	
Working Conditions	0	1	2	3	4
Exhaust fumes					⊗

Dust			⊗		
Hazardous substances				⊗	
Special Requirements	0	1	2	3	4
Use of personal protective equipment					⊗
Possible noise exposure					⊗

11.2.3 Log Maker Person Specification

Person Specifications
Operation: Logging
Role: Log Maker

TRAINING

	Induction
	Basic first aid
	Basic fire unit standards
	On-the-job training for the specified task – National Unit Standard qualifications with unit 22994 included in the training program

PRE-EMPLOYMENT REQUIREMENTS

	Pre-employment drug test
	Pre-employment medical test

PERSONNEL SPECIFICATIONS

Attributes	Relevant Criteria	How Identified	Rank (E/D)
<i>Experience/Knowledge</i>	Experience and understanding of the methods that can be applied to ensure maximum safety		
	Understanding of the raw timber resource and methods of value maximisation	T	E
	Knowing the cut plan and ability to apply priority strategy	I/T	E
	Understanding of chainsaw safety and maintenance	T	D
<i>Skills</i>	Ability to use and maintain a chainsaw as required	I/T	E
	Ability to be flexible in the various roles on a logging site – undertaking and assisting in other tasks	I/T	D

	as required		
	Understand the surrounding machinery and ensure constant acknowledgement to ensure safety	T	E
<i>Attributes</i>	Attention to detail	A/I/T	E
	Ability to maintain constant and effective communication	I/T	E
	Ability to make sound judgment and use initiative	T	E
	Work individually or as a team to achieve specified targets	I/T	E
	Ability to forward think, ensuring you are cutting targets as specified	T	D
	Willingness to learn	I/T	E
<i>Education/Training and Qualifications</i>	Hold the relevant unit standards and/or national certificates or undertaking formal training for the task	A/I	E
<i>Other Requirements</i>	Own and maintain personal chainsaw as required	I/T	E
	Able to work unsocial hours including early mornings, evenings and weekends	I	E
	Understand and comply with legal requirements as outlined in health and safety in employment act.	A/I/T	E

Rank: E = essential

D= desirable

How identified: A= application/CV
the job

I=interview

T=test/time in

PHYSICAL ATTRIBUTES

Aspects are rated on a 0-4 scale (considering frequency and importance)

0 – None

1-Low

2-Moderate

3-High

4-Very

High

Physical Requirements	0	1	2	3	4
Climbing into machinery		⊗			
Hearing				⊗	
Lifting				⊗	
Working bent					⊗
Use of arms					⊗
Use of legs					⊗
Use of feet					⊗
Walking					⊗
Standing					⊗
Sitting			⊗		
Vision (sight)					⊗
Colour distinction				⊗	
Depth perception				⊗	
Eye/hand co-ordination				⊗	
Bio-mechanical	0	1	2	3	4
Action repeating					⊗
High physical exertion			⊗		

Working Environment	0	1	2	3	4
High temperature				⊗	
Low temperature				⊗	
Noise					⊗
Dampness				⊗	
Vibration					⊗
Height			⊗		
Abnormal positions			⊗		
Working Conditions	0	1	2	3	4
Exhaust fumes					⊗
Dust			⊗		
Hazardous substances				⊗	
Special Requirements	0	1	2	3	4
Use of personal protective equipment					⊗
Possible noise exposure					⊗

11.2.4 Skid Worker Person Specification

Person Specifications
Operation: Logging
Role: Skid Worker

TRAINING

	Induction
	Basic first aid
	Basic fire unit standards
	On-the-job training for the specified task – National Unit Standard qualifications with unit 22994 included in the training program

PRE-EMPLOYMENT REQUIREMENTS

	Pre-employment drug test
	Pre-employment medical test

PERSONNEL SPECIFICATIONS

Attributes	Relevant Criteria	How Identified	Rank (E/D)
<i>Experience/Knowledge</i>	Experience and understanding of the method that can be applied to ensure safety	A/T	E
	Understanding of the resource, maximising value recovery as possible	T	E
	Experience and understanding of chainsaw use and safety	A/T	E
	Knowledge of the potential danger associated with the skid site therefore able to minimise the risk	I/T	E
	Have been deemed competent for the task at hand, or ensure sufficient supervision as required	T	E

<i>Skills</i>	Ability to use and maintain a chainsaw	T	E
	Ability to be flexible in the various roles on a logging site – undertaking and assisting in other tasks as required	I/T	E
	Ability to follow cut strategy directions as directed by the log maker	I/T	E
<i>Attributes</i>	Attention to detail, ensuring precision of cuts to maximise value recovery	T	E
	Work individually or as a team to achieve specified targets	I/T	E
	Willingness to learn	A/I	E
	Ability to make sound judgment and use initiative when appropriate	I/T	E
<i>Education/Training and Qualifications</i>	Hold the required unit standards/national certificates or be undertaking formal training for the task	A/I	E
	Hold appropriate chainsaw units, ensuring competency for operation	A/I	E
<i>Other Requirements</i>	Own and maintain personal chainsaw	A	E
	Able to work unsocial hours including early mornings, evenings and weekends	I	E
	Understand environmental requirements associated with handling fuels and oils	T	D
	Understand and comply with legal	A/I/T	E

	requirements as outlined in the health and safety in employment act.		
--	--	--	--

Rank: E = essential

D= desirable

How identified: A= application/CV
the job

I=interview

T=test/time in

PHYSICAL ATTRIBUTES

Aspects are rated on a 0-4 scale (considering frequency and importance)

0 – None

1-Low

2-Moderate

3-High

4-Very

High

Physical Requirements	0	1	2	3	4
Climbing into machinery		⊗			
Hearing				⊗	
Lifting				⊗	
Working bent					⊗
Use of arms					⊗
Use if legs					⊗
Use of feet					⊗
Walking					⊗
Standing					⊗
Sitting			⊗		
Vision (sight)				⊗	

Colour distinction				⊗	
Depth perception			⊗		
Eye/hand/foot co-ordination				⊗	
Bio-mechanical	0	1	2	3	4
Action repeating					⊗
High physical exertion					⊗
Working Environment	0	1	2	3	4
High temperature				⊗	
Low temperature				⊗	
Noise					⊗
Dampness					⊗

Vibration					⊗
Height		⊗			
Abnormal positions				⊗	
Working Conditions	0	1	2	3	4
Exhaust fumes					⊗
Dust				⊗	
Hazardous substances					⊗

Special Requirements	0	1	2	3	4
Use of personal protective equipment					⊗
Possible noise exposure					⊗

11.2.5 Loader Operator Person Specification

Person Specifications
Operation: Logging
Role: Loader Operator

TRAINING

	Induction
	Basic first aid
	Basic fire unit standards
	On-the-job training for the specified task – National Unit Standard qualifications with unit 22994 included in the training program

PRE-EMPLOYMENT REQUIREMENTS

	Pre-employment drug test
	Pre-employment medical test

PERSONNEL SPECIFICATIONS

Attributes	Relevant Criteria	How Identified	Rank (E/D)
<i>Experience/Knowledge</i>	Experience and understanding of the methods that can be applied to ensure maximum safety	A/T	E
	Knowledge of the operation, and the tasks required to be undertaken	I/T	E
	Understand the log grades being cut to ensure efficient and precise felling	T	D
<i>Skills</i>	Mechanically minded to keep track of maintenance and assist in undertaking minor repairs as required	I/T	E
	Ability to effectively and efficiently work with a team	A/I/T	E

	Ability to be flexible in role, being competent in assisting in other roles onsite as required.	I/T	E
<i>Attributes</i>	Willingness to learn	A/I/T	E
	Effective and constant communication with onsite crew as well as external service providers	I/T	E
	Ability to make sound judgment and use initiative when appropriate	I/T	E
	Attention to environmental detail and initiative to remediate and rectify as appropriate	A/I/T	E
	Attention to detail when fleeting to ensure quality	T	E
	Ability to work alone to load out early morning and late afternoon log trucks as required	I	E
<i>Education/Training and Qualifications</i>	Hold the required unit standards/national certificates or be under training for the specified task	A/I	E
<i>Other Requirements</i>	Able to work unsocial hours including early mornings, evenings and weekends	I	E
	Hold the appropriate driver's license for the vehicle/machine you operate as required	A/I	E
	Understand and comply with legal requirements as outlined in health and safety in employment act.	A/I/T	E

Rank: E = essential

D= desirable

How identified: A= application/CV
the job

I=interview

T=test/time in

PHYSICAL ATTRIBUTES

Aspects are rated on a 0-4 scale (considering frequency and importance)

0 – None

1-Low

2-Moderate

3-High

4-Very

High

Physical Requirements	0	1	2	3	4
Climbing into machinery					⊗
Hearing				⊗	
Lifting			⊗		
Working bent			⊗		
Use of arms					⊗
Use of legs				⊗	
Use of feet					⊗
Walking				⊗	
Standing			⊗		
Sitting					⊗
Vision (sight)					⊗
Colour distinction				⊗	
Depth perception				⊗	
Eye/hand/foot co-ordination					⊗
Bio-mechanical	0	1	2	3	4

Action repeating					⊗
High physical exertion		⊗			
Working Environment	0	1	2	3	4
High temperature			⊗		
Low temperature			⊗		
Noise					⊗
Dampness		⊗			
Vibration				⊗	
Height			⊗		
Abnormal positions			⊗		
Working Conditions	0	1	2	3	4
Exhaust fumes			⊗		
Dust			⊗		
Hazardous substances				⊗	
Special Requirement	0	1	2	3	4

nts					
Use of personal protective equipment					⊗
Possible noise exposure					⊗

11.2.6 Hauler Operator Person Specification

Person Specifications
Operation: Logging Crew
Role: Yarder Operator

TRAINING

	Induction
	Basic first aid
	Basic fire unit standards
	On-the-job training for the specified task – National Unit Standard qualifications with unit 22994 included in the training program

PRE-EMPLOYMENT REQUIREMENTS

	Pre-employment drug test
	Pre-employment medical test

PERSONNEL SPECIFICATIONS

Attributes	Relevant Criteria	How Identified	Rank (E/D)
<i>Experience/Knowledge</i>	Experience and understanding of the methods that can be applied to ensure safety	A/T	E
	Knowledge of the system being used onsite	I/T	E
	Experience in various other positions on the logging site, and ability to assist as required	A/I	D
<i>Skills</i>	Mechanically minded to keep track of maintenance and assist in undertaking minor repairs	A/I	E
	Ability to work effectively with others	I/T	E
<i>Attributes</i>	Willingness to learn	I/T	E
	Effective and constant	I/T	E

	communication with appropriate personnel		
	Ability to make sound judgment and use initiative	T	E
	Attention to environmental detail and initiative to remediate and rectify as required	T	E
<i>Education/Training and Qualifications</i>	Hold the required unit standards/national certificates or be under training for the task	A/I	E
<i>Other Requirements</i>	Able to work unsocial hours including early mornings, evenings and weekends	I	E
	Appropriate drivers license for the vehicle/machine you are operating	A/I	E
	Understand and comply with legal requirements as outlined in Health and safety in employment act.	A/I/T	E

Rank: E = essential

D= desirable

How identified: A= application

I=interview

T=test/time in the job

PHYSICAL ATTRIBUTES

Aspects are rated on a 0-4 scale (considering frequency and importance)

0 – None

1-Low

2-Moderate

3-High

4-Very

High

Physical Requirements	0	1	2	3	4
Climbing into machinery					⊗
Hearing				⊗	
Lifting			⊗		
Working bent			⊗		
Use of arms					⊗
Use of legs				⊗	
Use of feet					⊗
Walking				⊗	
Standing			⊗		
Sitting					⊗
Vision (sight)					⊗
Colour distinction				⊗	
Depth perception					⊗
Eye/hand/foot co-ordination					⊗
Bio-mechanical	0	1	2	3	4
Action repeating					⊗
High physical exertion		⊗			
Working Environment	0	1	2	3	4

High temperature				⊗	
Low temperature				⊗	
Noise					⊗
Dampness		⊗			
Vibration				⊗	
Height		⊗			
Abnormal positions		⊗			
Working Conditions	0	1	2	3	4
Exhaust fumes					⊗
Dust				⊗	
Hazardous substances			⊗		
Special Requirements	0	1	2	3	4
Use of personal protective equipment					⊗
Possible noise exposure					⊗

11.2.7 Thin-to-waste Person Specification

Person Specifications
Operation: Silviculture
Role: Thinner – thin to waste

TRAINING

	Induction
	Basic first aid
	Basic fire unit standards
	On-the-job training for the specified task – National Unit Standard qualifications with unit 22994 included in the training program

PRE-EMPLOYMENT REQUIREMENTS

	Pre-employment drug test
	Pre-employment medical test

PERSONNEL SPECIFICATIONS

Attributes	Relevant Criteria	How Identified	Rank (E/D)
<i>Experience/Knowledge</i>	Experience and understanding of the methods that can be applied to ensure maximum safety	A/T	E
	Experience and understanding of chainsaw use and safety	A/T	E
	Knowledge of the desired forest structure to be achieved from the thinning regime as specified in the issued prescription	I/T	E
	Have been deemed competent for the task, or ensure required supervision is achieved	T	E
<i>Skills</i>	Ability to use and maintain chainsaw as required	A/I/T	E

	Ability to be flexible in the various roles within silvicultural operations	I/T	D
<i>Attributes</i>	Willingness to learn	I/T	E
	Ability to work effectively and safely as a team	I/T	E
	Maintain constant and effective communication	I/T	E
	Ability to make sound judgment and use initiative when appropriate	T	E
	Work individually or as a team to achieve specified targets	T	E
	Ability to think forward, developing plans of the period production	I/T	E
	Attention to environmental detail and initiative to rectify as appropriate	T	E
<i>Education/Training and Qualifications</i>	Be training toward or hold the appropriate national certificate and unit standards for the task	A/I	E
<i>Other Requirements</i>	Own and operate own chainsaw as required	A	E
	Able to work unsocial hours including early mornings, evenings and weekends	I	E
	Understand and comply with legal requirements as outlined in the Health and safety in employment act.	A/I/T	E

Rank: E = essential

D= desirable

How identified: A= application/CV
the job

I=interview

T=test/time in

PHYSICAL ATTRIBUTES

Aspects are rated on a 0-4 scale (considering frequency and importance)

0 – None

1-Low

2-Moderate

3-High

4-Very

High

Physical Requirements	0	1	2	3	4
Climbing into machinery		⊗			
Hearing				⊗	
Lifting					⊗
Working bent					⊗
Use of arms					⊗
Use of legs					⊗
Use of feet					⊗
Walking					⊗
Standing					⊗
Sitting		⊗			
Vision (sight)					⊗
Colour distinction				⊗	
Depth perception					⊗
Eye/hand/foot co-ordination					⊗
Bio-mechanical	0	1	2	3	4

Action repeating					⊗
High physical exertion					⊗
Working Environment	0	1	2	3	4
High temperature				⊗	
Low temperature				⊗	
Noise					⊗
Dampness				⊗	
Vibration					⊗
Height		⊗			
Abnormal positions				⊗	
Working Conditions	0	1	2	3	4
Exhaust fumes					⊗
Dust			⊗		
Hazardous substances				⊗	
Special Requirements	0	1	2	3	4

Use of personal protective equipment					⊗
Possible noise exposure					⊗

11.2.8 Pruner Person Specification

Person Specifications
Operation: Silviculture
Role: Pruner

TRAINING

	Induction
	Basic first aid
	Basic fire unit standards
	On-the-job training for the specified task – National Unit Standard qualifications with unit 22994 included in the training program

PRE-EMPLOYMENT REQUIREMENTS

	Pre-employment drug test
	Pre-employment medical test

PERSONNEL SPECIFICATIONS

Attributes	Relevant Criteria	How Identified	Rank (E/D)
<i>Experience/Knowledge</i>	Experience and understanding of the methods that can be applied to ensure maximum safety whilst onsite	A/T	E
	Knowledge of the operation being carried out and the intended purpose of it	I/T	E
	Understand the intended forest structure as identified in the prescription	T	E
<i>Skills</i>	Ability to be flexible in the role, assisting in other silvicultural tasks as required	I/T	E
	Ability to follow instructions as identified by supervisor and within the issued prescription	T	E

<i>Attributes</i>	Willingness to learn	I/T	E
	Ability to work effectively with others	I/T	E
	Effective and constant communication with appropriate personnel	I/T	E
	Ability to make sound judgment and use initiative where appropriate	T	E
	Attention to environmental detail and initiative to remediate and rectify as appropriate	T	E
	Understand your personal responsibility onsite in regards to health and safety of yourself and others	T	E
<i>Education/Training and Qualifications</i>	Hold the required unit standards/national certificates or be undertaking formal training for the specific task	A/I	E
<i>Other Requirements</i>	Able to work unsocial hours including early mornings, evenings and weekends	I	E
	Hold the appropriate drivers license for the vehicle/ machine you are operating	A/I	E
	Understand and comply with legal requirements as outlined in the health and safety in employment act.	A/I/T	E
	Understand recording requirements for health and safety and environmental incidents	I/T	E

	Ability to work at heights as required for the specified prune lift height	I/T	E
--	--	-----	---

Rank: E = essential

D= desirable

How identified: A= application/CV
the job

I=interview

T=test/time in

PHYSICAL ATTRIBUTES

Aspects are rated on a 0-4 scale (considering frequency and importance)

0 – None

1-Low

2-Moderate

3-High

4-Very

High

Physical Requirements	0	1	2	3	4
Climbing ladders					⊗
Hearing				⊗	
Lifting					⊗
Working bent			⊗		
Use of arms					⊗
Use of legs					⊗
Use of feet					⊗
Walking					⊗
Standing					⊗
Sitting		⊗			

Vision (sight)					⊗
Colour distinction					⊗
Depth perception					⊗
Eye/hand/foot co-ordination					⊗
Bio-mechanical	0	1	2	3	4
Action repeating					⊗
High physical exertion					⊗
Working Environment	0	1	2	3	4
High temperature				⊗	
Low temperature				⊗	

Noise			⊗		
Dampness				⊗	
Vibration			⊗		
Height					⊗
Abnormal positions				⊗	
Working Conditions	0	1	2	3	4
Exhaust fumes			⊗		
Dust			⊗		
Hazardous substances			⊗		
Special Requirements	0	1	2	3	4
Use of personal protective equipment					⊗
Possible noise exposure			⊗		

11.3.1 Harvesting Operation Questionnaire



JUKEN NEW ZEALAND LTD, PO Box 629, Gisborne Phone: 06) 8691180 Fax: 06) 8691122

Why a Survey?

- *So we can find out why people want to work for us and do more to make JNL a great company to work for!*
- *So we can promote our people to the community and stakeholder groups*

Name: (optional)

Age:

Gender:

☐

Male

☐

Female

Marital Status

☐

Single

☐

Married/Engaged,
Partner

Living

with

No. of Children:

Ethnicity:

NZ European

☐

NZ Maori

☐

Other

☐

If Maori, what is your iwi?

Residency Status

New Zealand Citizen

New Zealand Work Permit holder

Are you originally from the East Coast?

--

Yes

--

No

If
where

No,

Do you currently live in the East Coast?

--

Yes

--

No

If
where

No,

How long have you lived in the East Coast?

years

Where do you travel to work from?

--

City / Town

--

Country

Who do you work for?

(Crew Name / Operator)

Harvesting

--

Forestry/Silviculture

--

Cartage

--

Roding/Engineering

--

Staff

--

What is your highest level of education?

Secondary School

--

Polytechnic

--

University

--

Do you regard English as your first or second language?

First

☐

Second

☐

What Qualifications do you hold?

5th Form / School Certificate / NCEA Level 1

☐

6th Form / NCEA Level 2

☐

7th Form / NCEA Level 3

☐

Polytechnic Certificate/Diploma

☐

University Degree

☐

Forestry Units

☐

Forestry National Certificate

☐

Trade Certificate

☐

Description of Qualifications:

Why have you chosen to work in the forest industry:

How long have you worked in

the forest industry?

_____ years

How long have you worked in JNL operations?

_____ years

How long have you worked for your current crew or employer?

_____ years

How long have you worked in your current position?

_____ years

Where were you employed two years ago?

Same Job

Another position, current crew

Another crew

Other area of forestry

Other region

Other (please specify)

How did you find out about your job?

Answered advertisement

Offered position

Relative

Friend

Asked Contractor

Other (please specify)

What do you plan to do in the future?

Same as current job

Another position in current operation

Working in another crew

Change to another forest activity

Move to another region

Change career

Other (please specify)

What do you like best about your job?

Travel time

Type of work

Work environment

Crew

Length of work day

Pay

Other (please specify)

What do you like least about your job?

Weather conditions

Travel time

Type of work

Work environment

Crew

Length of work day

Pay

Other (please specify)

If you selected length of work day as undesirable, what would you consider a reasonable length work day?

If you selected travel time as undesirable, what would you consider a reasonable time to travel to work (one way)?

How safe do you feel your work operation is:

Extremely unsafe

Unsafe

Moderately safe

Very safe

Extremely safe

What worries you the most about your job?

Do you believe more

**could be done to
increase safety**

☐

Yes

☐

No

(If yes, specify)

**Do you believe that
JNL is doing enough
to ensure a safe work
environment?**

☐

Yes

☐

No

**What is dangerous in
your job?**

**If your safety is in
jeopardy are you
prepared to speak
out?**

Yes

☐

No

☐

**What near misses
have you had
recently?**

Yes

☐

No

☐

**Do you have any
recommendations for
JNL to improve health
and safety in the
workforce?**

What does JNL do well in regard to health and safety?

What does JNL not do so well in regard to health and safety?

Do you believe the IMS has improved health and safety in the work place? (if so, how)

What part of health and safety do you do well?

What part of health and safety do you struggle with?

How can things be improved in your specific crew in regards to health and safety?

Do you agree with or support JNL's drug testing program?

Strongly disagree

Disagree

Neither agree or disagree

Agree

Totally Agree

How many days holiday do you get each year?

days *(excluding statutory holidays e.g. Xmas Day)*

Do you like working on public holidays / weekends?

☐

Yes

☐

No

Is JNL a good company to work for overall?

Yes

No

Unsure

If not, how could we improve?

Part Two

1. Do you understand your responsibilities under the ACoP?

Yes ☐ ☐ No

a. If so, what are 3 specific responsibilities to your role?

1 _____

2 _____

3 _____

2. Do you understand your individual and crew requirements for day-to-day operations as identified in the IMS system (green folder)?

Yes ☐ No ☐

a. What are 4 of the 9 sections within the folder?

1 _____

2 _____

3 _____

4 _____

3. What driver's license do you currently have?

a. Does it cover the legal requirements if you are to operate machinery onsite?

Yes ☐ ☐ No

4. Have you achieved the required qualifications to undertake your current role? (Unit Standard 1258 and been deemed competent for the task)

☐ Yes ☐ No

a. If not, are you under training? _____

b. And do you receive the required supervision for you to carry out the task? _____

5. Have you achieved any other qualifications to assist in other roles onsite?

a. If so, what other qualifications?

6. Are you carrying out training while at work either for your current role, or another role onsite?

Yes ☐ No ☐

a. If so, what does this training include? (e.g. national certificates, single unit standards)

7. Have you been given all learning from your foreman and/or

Yes ☐ No ☐

☐
☐
☐
☐
☐

opportunities to continue company?

a. Do you have desire to your role?

continue training to improve in

Strongly satisfied (sufficient training opportunities)

Agree

Satisfied

Disagree

Strongly dissatisfied (want to do more training)

8. Do you recognise and understand your responsibilities associated with following up training to ensure safety and production in your role?

a. If so, what do those include, where are you at with your following up training and continuous development?

9. Do you believe the hours you work have a more significant impact on your family life than another occupation? _____

a. If so, what do you believe could be done to improve?

10. How much experience do you have as a breaker out? _____ years

_____ months

11. What can you tell me about the impact each drag has on potential productivity, including volume of the drag and positioning of strop on log?

12. Do you assist your crew foreman in the planning of a safe extraction operation for all involved?

☐

Yes

☐

No

13. Are you able to forward plan, looking at when line changes are required and presetting them to make it faster?

☐

Yes

☐

No

14. Have you identified a potentially dangerous situation recently?

☐

Yes

☐

No

15. Tell me about the situation in the workplace and what you did to reduce the potential impact of the situation.

16. Are you able to work safely with other crew members, ensuring your own and their safety at all times? _____

17. How often do you record/raise the issue of health and safety and environmental incidents?

Daily	<input type="checkbox"/>	
	<input type="checkbox"/>	Weekly
	<input type="checkbox"/>	Monthly
	<input type="checkbox"/>	Quarterly
	<input type="checkbox"/>	Annually
	<input type="checkbox"/>	Never

18. Do you regularly have input in safety meetings to further build on ideas to ensure everyone onsite is safe? _____
a. Are you able to completely understand your responsibility outcomes from these meetings? _____

Any further comments?

11.3.2 Machine Operator Questionnaire



JUKEN NEW ZEALAND LTD, PO Box 629, Gisborne Phone: 06) 8691180 Fax: 06) 8691122

Why a Survey?

- *So we can find out why people want to work for us and do more to make JNL a great company to work for!*
- *So we can promote our people to the community and stakeholder groups*

Name:
(optional)

Age:

Gender:

☐

Male

☐

Female

Marital Status

☐

Single

☐

Married/Engaged,
Partner

Living

with

No. of Children:

Ethnicity:

NZ European

☐

NZ Maori

☐

Other

☐

If Maori, what is your iwi?

Residency Status

New Zealand Citizen

New Zealand Work Permit holder

Are you originally from the East Coast?

--

Yes

--

No

If
where

No,

Do you currently live in the East Coast?

--

Yes

--

No

If
where

No,

How long have you lived in the East Coast?

_____ years

Where do you travel to work from?

--

City / Town

--

Country

Who do you work for?

(Crew Name / Operator)

Harvesting

--

Forestry/Silviculture

--

Cartage

--

Roading/Engineering

--

Staff

--

What is your highest level of education?

Secondary School

--

Polytechnic

--

University

--

Do you regard English as your first or second language?

First

Second

What Qualifications do you hold?

5th Form / School Certificate / NCEA Level 1

6th Form / NCEA Level 2

7th Form / NCEA Level 3

Polytechnic Certificate/Diploma

University Degree

Forestry Units

Forestry National Certificate

Trade Certificate

Description of Qualifications:

Why have you chosen to work in the forest industry:

How long have you worked in

the forest industry? _____ years

How long have you worked in JNL operations? _____ years

How long have you worked for your current crew or employer? _____ years

How long have you worked in your current position? _____ years

Where were you employed two years ago?

Same Job

Another position, current crew

Another crew

Other area of forestry

Other region

Other (please specify)

How did you find out about your job?

Answered advertisement

Offered position

Relative

Friend

Asked Contractor

Other (please specify)

What do you plan to do in the future?

Same as current job

--

Another position in current operation

Working in another crew

Change to another forest activity

Move to another region

Change career

Other (please specify)

What do you like best about your job?

Travel time

Type of work

Work environment

Crew

Length of work day

Pay

Other (please specify)

What do you like least about your job?

Weather conditions

Travel time

Type of work

Work environment

Crew

Length of work day

Pay

Other (please specify)

If you selected length of work day as undesirable, what would you consider a reasonable length work day?

If you selected travel time as undesirable, what would you consider a reasonable time to travel to work (one way)?

How safe do you feel your work operation is:

Extremely unsafe

Unsafe

Moderately safe

Very safe

Extremely safe

What worries you the most about your job?

Do you believe more

**could be done to
increase safety**

☐

Yes

☐

No

(If yes, specify)

**Do you believe that
JNL is doing enough
to ensure a safe work
environment?**

☐

Yes

☐

No

**What is dangerous in
your job?**

**If your safety is in
jeopardy are you
prepared to speak
out?**

Yes

☐

No

☐

**What near misses
have you had
recently?**

Yes

☐

No

☐

**Do you have any
recommendations for
JNL to improve health
and safety in the
workforce?**

What does JNL do well in regard to health and safety?

What does JNL not do so well in regard to health and safety?

Do you believe the IMS has improved health and safety in the work place? (if so, how)

What part of health and safety do you do well?

What part of health and safety do you struggle with?

How can things be improved in your specific crew in regards to health and safety?

Do you agree with or support JNL's drug testing program?

Strongly disagree

Disagree

Neither agree or disagree

Agree

Totally Agree

How many days holiday do you get each year?

days *(excluding statutory holidays e.g. Xmas Day)*

Do you like working on public holidays / weekends?

☐

Yes

☐

No

Is JNL a good company to work for overall?

Yes

No

Unsure

If not, how could we improve?

Part Two

19. Do you understand your responsibilities under the ACoP?

Yes ☐ ☐ No

a. If so, what are 3 specific responsibilities to your role?

1 _____

2 _____

3 _____

20. Do you understand your individual and crew requirements for day-to-day operations as identified in the IMS system (green folder)?

Yes ☐ No ☐

a. What are 4 of the 9 sections within the folder?

1 _____

2 _____

3 _____

4 _____

21. What driver's license do you currently have?

a. Does it cover the legal requirements for you to operate the loader?

Yes ☐ ☐ No

22. Have you achieved the required qualifications to undertake your current role?

☐ Yes ☐ No

a. If not, are you under training? _____

23. Have you achieved any other qualifications to assist in other roles onsite?

a. If so, what other qualifications?

24. Are you carrying out training while at work either for your current role, or another role onsite?

Yes ☐ No ☐

a. If so, what does this training include? (e.g. national certificates, single unit standards)

25. Have you been given all from your foreman or

Yes ☐ No ☐

☐
☐
☐
☐
☐

opportunities to continue learning company?

a. Do you wish to role?

continue training to improve in your

Strongly satisfied (sufficient training opportunities)

Agree

Satisfied

Disagree

Strongly dissatisfied (want to do more training)

26. Do you recognise and understand your responsibilities associated with following up training to ensure safety and production in your role?

a. If so, what do those include, where are you at with your following up training and continuous development?

- b. What mechanical understanding and qualifications do you hold and are they sufficient to ensure maintenance and minor repairs can be undertaken as required?

27. Do you believe the hours you work have a more significant impact on your family life than another occupation? _____

- a. If so, what do you believe could be done to improve?

28. How much experience do you have operating a loader? _____ years
_____ months

29. What practical steps do you take for environmental consideration when operating the machine and dealing with slash and soil onsite including positioning through day-to-day management?

- a. Have you completed units 17772 and 17773?

☐

Yes

☐

No

30. Do you keep regular communication with your crew foreman and dispatch to ensure regular rotation of log stocks and customer demands are being met?

☐

Yes

☐

No

31. Are you able to accurately quality control logs as they are loaded out to ensure customer satisfaction as well as completion of log dockets?

☐

Yes

☐

No

32. Have you identified a potentially dangerous situation recently?

☐

Yes

☐

No

33. Tell me about the situation in the workplace and what you did to reduce the potential impact of the situation.

34. Are you able to work safely with other crew members, ensuring your own and their safety at all times? _____

35. How often do you record/raise the issue of health and safety and environmental incidents?

Daily

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Weekly
Monthly
Quarterly
Annually
Never

36. Do you regularly have input in safety meetings to further build on ideas to ensure everyone onsite is safe? _____

a. Are you able to completely understand your responsibility outcomes from these meetings? _____

Any further comments?

11.3.3 Silviculture Questionnaire



JUKEN NEW ZEALAND LTD, PO Box 629, Gisborne Phone: 06) 8691180 Fax: 06) 8691122

Why a Survey?

- *So we can find out why people want to work for us and do more to make JNL a great company to work for!*
- *So we can promote our people to the community and stakeholder groups*

Name:
(optional)

Age:

Gender:

☐

Male

☐

Female

Marital Status

☐

Single

☐

Married/Engaged,
Partner

Living

with

No. of Children:

Ethnicity:

NZ European

☐

NZ Maori

☐

Other

☐

If Maori, what is your iwi?

Residency Status

New Zealand Citizen

New Zealand Work Permit holder

Are you originally from the East Coast?

--

Yes

--

No

If
where

No,

Do you currently live in the East Coast?

--

Yes

--

No

If
where

No,

How long have you lived in the East Coast?

years

Where do you travel to work from?

--

City / Town

--

Country

Who do you work for?

(Crew Name / Operator)

Harvesting

--

Forestry/Silviculture

--

Cartage

--

Roading/Engineering

--

Staff

--

What is your highest level of education?

Secondary School

--

Polytechnic

--

University

--

Do you regard English as your first or second language?

First

☐

Second

☐

What Qualifications do you hold?

5th Form / School Certificate / NCEA Level 1

☐

6th Form / NCEA Level 2

☐

7th Form / NCEA Level 3

☐

Polytechnic Certificate/Diploma

☐

University Degree

☐

Forestry Units

☐

Forestry National Certificate

☐

Trade Certificate

☐

Description of Qualifications:

Why have you chosen to work in the forest industry:

How long have you worked in

the forest industry?	_____	years
How long have you worked in JNL operations?	_____	years
How long have you worked for your current crew or employer?	_____	years
How long have you worked in your current position?	_____	years
Where were you employed two years ago?	<div>Same Job</div> <div>Another position, current crew</div> <div>Another crew</div> <div>Other area of forestry</div> <div>Other region</div> <div>Other (please specify)</div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>
How did you find out about your job?	<div>Answered advertisement</div> <div>Offered position</div> <div>Relative</div> <div>Friend</div> <div>Asked Contractor</div> <div>Other (please specify)</div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>
What do you plan to do in the future?	<div>Same as current job</div>	<div></div>

Another position in current operation

Working in another crew

Change to another forest activity

Move to another region

Change career

Other (please specify)

What do you like best about your job?

Travel time

Type of work

Work environment

Crew

Length of work day

Pay

Other (please specify)

**What do you like
least about your
job?**

Weather conditions

Travel time

Type of work

Work environment

Crew

Length of work day

Pay

Other (please specify)

If you selected length of work day as undesirable, what would you consider a reasonable length work day?

If you selected travel time as undesirable, what would you consider a reasonable time to travel to work (one way)?

**How safe do you
feel your work
operation is:**

Extremely unsafe

Unsafe

Moderately safe

Very safe

Extremely safe

**What worries you
the most about
your job?**

Do you believe more could be done to increase safety

☐

Yes

☐

No

(If yes, specify)

Do you believe that JNL is doing enough to ensure a safe work environment?

☐

Yes

☐

No

What is dangerous in your job?

If your safety is in jeopardy are you prepared to speak out?

Yes

☐

No

☐

What near misses have you had recently?

Yes

☐

No

☐

Do you have any recommendations for JNL to improve health and safety in the workforce?

What does JNL do well in regard to health and safety?

What does JNL not do so well in regard to health and safety?

**Do you believe the IMS has improved health and safety in the work place?
(if so, how)**

What part of health and safety do you do well?

What part of health and safety do you struggle with?

How can things be improved in your specific crew in regards to health and safety?

**Do you agree with
or support JNL's
drug testing
program?**

- Strongly disagree
- Disagree
- Neither agree or disagree
- Agree
- Totally Agree

**How many days
holiday do you get
each year?**

days *(excluding statutory holidays e.g. Xmas Day)*

**Do you like
working on public
holidays /
weekends?**

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
--------------------------	-----	--------------------------	----

**Is JNL a good
company to work
for overall?**

- Yes
- No
- Unsure

If not, how could we improve?

Part Two

37. Do you understand your responsibilities under the ACoP?

Yes ☐ ☐ No

a. If so, what are 3 specific responsibilities to your role?

1 _____

2 _____

3 _____

38. Do you understand your individual and crew requirements for day-to-day operations as identified in the IMS system (green folder)?

☐ ☐
Yes No

a. What are 4 of the 9 sections within the folder?

1 _____

2 _____

3 _____

4 _____

39. Have you achieved the required qualifications to undertake your current role?

☐ Yes ☐ No

a. If not, are you under training? _____

b. And do you receive the required supervision for you to carry out the task? _____

40. Have you achieved any other qualifications to assist in other roles onsite?

a. If so, what other qualifications?

Are you carrying out training while at work either for your current role, or another role onsite?

Yes ☐ No ☐

b. If so, what does this training include? (e.g. national certificates, single unit standards)

41. Have you been given all learning from your foreman or

Yes ☐ No ☐

a. Do you have desire to improve in your role?

opportunities to continue company?

continue carrying out training to

Strongly agree (sufficient training opportunities)

Agree

Satisfied

Disagree

Strongly dissatisfied (want to do more training)

42. Do you recognise and understand your responsibilities associated with following up training to ensure safety and production in your role?

a. If so, what do those include, where are you at with your following up training and continuous development?

43. Do you believe the hours you work have a more significant impact on your family life than another occupation? _____

a. If so, what do you believe could be done to improve?

44. How much experience do you have as a thinner? _____ years

_____ months

45. What can you tell me about the impact thinning has on the future crop?

46. Do you assist your crew foreman in the planning of a safe thinning operation for all involved?

☐

Yes

☐

No

47. Do you understand the practical steps that should be taken to ensure the crop trees are not damaged and maximum crop value is achieved?

☐

Yes

☐

No

48. Have you identified a potentially dangerous situation recently?

☐

Yes

☐

No

49. Tell me about the situation in the workplace and what you did to reduce the potential impact of the situation.

50. Are you able to work safely with other crew members, ensuring your own and their safety at all times? _____

51. How often do you record/raise the issue of health and safety and environmental incidents?

Daily	<input type="checkbox"/>	
Weekly	<input type="checkbox"/>	
Monthly	<input type="checkbox"/>	
	<input type="checkbox"/>	Quarterly
	<input type="checkbox"/>	Annually
Never	<input type="checkbox"/>	

52. Do you regularly have input in safety meetings to further build on ideas to ensure everyone onsite is safe? _____

a. Are you able to completely understand your responsibility outcomes from these meetings? _____

Any further comments?
